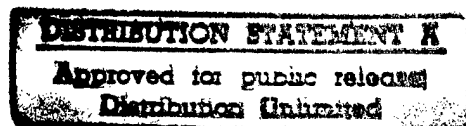


CONGRESS AND SDIO, 1983-1989
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INTRODUCTION

(U) Shortly after taking up his duties in March 1989 as President George Bush's Secretary of Defense, Dick Cheney reaffirmed his support of the Strategic Defense Initiative (SDI), the research and development (R&D) program launched six years earlier by President Ronald Reagan to counter the threat posed by Soviet offensive ballistic missiles. But while he pledged to continue to promote SDI, Cheney also said he believed that the program had been "oversold" to the American public. Indeed, Cheney thought that Reagan's stated aim of rendering nuclear weapons "impotent and obsolete" any time in the foreseeable future was such "an extremely remote possibility" that he saw no choice but to pursue less lofty objectives, at less cost and less effort. Under the new administration, he indicated, SDI would no longer be the high priority item it had been during Reagan's presidency.¹

(U) This shift of emphasis was the result of a variety of factors, not the least of which was the growing opposition to and skepticism over SDI in Congress. That Congress should have taken such a critical position was something of a departure from its usual custom, since normally Congress grants military R&D programs considerable leeway in the interests of national security. SDI, however, posed a unique set of problems, and thus received different treatment. Not only was it one of the most expensive and technically complex military R&D programs of all time, but also it cut a highly visible political profile. The goal of SDI, in Reagan's view, was a virtually impenetrable peace shield based mainly in outer space, utilizing the most advanced technologies such as lasers, particle beams, and kinetic energy weapons, many of which were little more than drawing board concepts. Once in place, the purpose of such a system would be nothing less than to free mankind of the threat of nuclear holocaust, an admirable objective, to be sure, but not one that all in Congress saw as being attainable solely or even in part through SDI. With sentiment and opinion thus polarized almost from the very outset, SDI was a natural candidate for close congressional oversight.

¹ Washington Post, March 29, 1989.

(U) The congressional debate over SDI was wide-ranging and free-wheeling, covering a myriad of issues--not only the formidable technical problems the program faced, but also its possible impact on such issues as arms control, the growing Federal budget deficit, the East-West strategic balance, relations with U.S. allies, and perhaps most important of all, the future of the 1972 Anti-Ballistic Missile (ABM) Treaty between the United States and the Soviet Union. In other words, SDI posed numerous questions of feasibility, not just from a scientific and technical standpoint, but also in terms of overcoming equally formidable political, fiscal, and strategic hurdles. After nearly five years of hearings, floor debate, and other deliberations addressing these issues--from March 1983 when Reagan first proposed SDI, to January 1989 when he left office--only one thing was clear: the political controversy over SDI, or "star wars," as its enemies and critics derided it, was just as fresh and vigorous as ever.²

(U) This study, concentrating on the period of Reagan's presidency, examines the role of Congress in the development and evolution of the Strategic Defense Initiative, including relations between Congress and the Strategic Defense Initiative Organization (SDIO), which exercised primary responsibility for the program within the Department of Defense. The argument presented here is that Congress played a larger role in shaping SDI that is generally appreciated, following a general pattern of steadily growing congressional involvement in defense and national security affairs since World War II;³ and that the debate over SDI in Congress became a major focal point of competing liberal and conservative values, a persistent conflict throughout the Reagan years. The distinction drawn in this study between liberals and conservatives refers both to the policies and programs they endorsed, and to the mindset that their preferences reflected. For Congressional liberals, this meant a government-oriented approach to problem-solving, increased emphasis on meeting domestic needs, particularly for the underprivileged, and relatively less expenditure of energy and resources on

² The term "star wars" came from a highly popular 1977 science fiction motion picture of the same title, and was used derisively by critics to try to convey what they deemed the absurdity of Reagan's program.

³ On the background of growing congressional involvement, see Steven L. Rearden, "Congress and National Defense, 1945-1950," in Richard H. Kohn, The United States Military under the Constitution of the United States, 1789-1989 (New York: New York University Press, 1991), 271-289.

foreign and defense policy. Conservatives, on the other hand, followed a different persuasion that down-played the role of government in virtually all but foreign and domestic affairs. Accordingly, they sought a more *laissez faire* approach to the economy that would reward individual initiative, a more active foreign policy to counter communist expansion, and a stronger defense posture in the face of what they viewed as an ever increasing threat posed by the Soviet Union.

(U) Most senators and representatives, following congressional custom, never openly acknowledged that purely political considerations, including political ideology, were the deciding factors in how they voted on SDI. But a sizable number--opponents on the left, supporters on the right--seized on SDI as a means of advancing their own particular political agendas. For those on the left (i.e., liberal Democrats for the most part) SDI was an unnecessary diversion of resources which would be better spent either on strengthening conventional military capabilities or, preferably, on improving domestic programs. Afro-American members of Congress, representing predominantly depressed inner-city areas that were heavily dependent on Federal subsidies, were especially critical of SDI. They considered it not only an immediate drain on essential public welfare programs but also the first step toward a massive, long-term claim on resources by the military that would leave their constituents worse off than ever in the future.

(U) Conservative Republicans, on the other hand, regarded SDI as probably the most important national security issue of the decade and potentially Reagan's greatest legacy--ridding the Free World of the threat of nuclear destruction. Given these high stakes and expectations, and the political opportunities they presented, it was hardly surprising that congressional conservatives and their followers placed furthering SDI at or near the top of their list of priorities. As time went on, SDI became practically as much a symbol of conservative Republican politics as Ronald Reagan himself. Yet it was this same enthusiasm for SDI that gradually helped to weaken the program's appeal and general support on Capitol Hill. So eager were many conservatives to see deployment of SDI, even if only on a limited scale, that they created an atmosphere in which the administration had no real choice other than to take arguable positions on issues--the interpretation of the ABM Treaty in particular--that diminished support for SDI among congressional moderates and opened the way for the program's opponents to impose crippling constraints.

(U) In fact, the ideological division in Congress over ballistic missile defense was by no means new to the Reagan years; its roots extended back to the splits between liberals and conservatives over the Vietnam War and the ABM debate of the late 1960s and early 1970s. But it was during Reagan's presidency, with the appearance of SDI, that the divisiveness reached its peak. Not only was SDI one of the most complicated technical issues ever to come before Congress; it was also one of the most politically explosive as well. Though Reagan undoubtedly never imagined the full range of consequences, political and otherwise, that flowed from his decision to launch SDI, he embarked upon the program confident that ultimately it would reshape military strategy and produce a less threatening, more stable international environment. From Capitol Hill, however, Reagan's vision of the future was neither quite so clear nor confidently accepted.

CHAPTER I
CONGRESS AND BALLISTIC MISSILE DEFENSE:
THE HISTORIC SETTING (1945-1972)

The Origins of Ballistic Missile Defense

(U) The ballistic missile defense (BMD) programs that first came to Congress's attention in the late 1950s and 1960s were all products of initiatives taken near the end of or immediately after World War II. All were also outgrowths of antiaircraft programs, since attention at the time focused primarily on the development of more effective defenses against attacking aircraft. But with the advent in 1944 of the German V-2 rocket, it was apparent that a need for an antimissile capability would arise someday as well. The earliest such program was part of Project Thumper dating from 1945, a collaborative defensive missile effort between the Army and General Electric. Though relegated to low priority because of the difficulties involved, Thumper nonetheless helped to pave the way for later research. From the studies and technology it generated evolved Project Nike which in the years ahead would yield a whole family of defensive systems, including the first antimissile missile, the Nike-Zeus.¹

(U) By war's end the number of research and development projects with antimissile potential had grown considerably. In 1945 the Army Air Forces (AAF) inaugurated the GAPA program (for ground-to-air pilotless aircraft), which later incorporated aspects of Project Thumper. Concentrating on the "collision intercept" of incoming aircraft, GAPA eventually gave rise to the Air Force's Bomarc antibomber area defense system deployed in the 1950s.² A related set of studies, known as Project Wizard, looked further ahead. Initiated shortly after the war at the University of Michigan's Air Research Center, Wizard's main purpose was to examine the feasibility of using one ballistic missile to shoot down another. In 1953, despite mixed results from these studies, the Air Research

¹ Benson D. Adams, Ballistic Missile Defense (New York: American Elsevier, 1971), 17-18.

² *Ibid*, 18.

and Development Command set in motion Wizard-3, directing the Air Force Cambridge Research Center-Lincoln Laboratory team to prepare a study plan for defense against possible attacks by intercontinental ballistic missiles.³

(U) Over the next few years interest in ballistic missile defense waxed and waned, depending mainly on projections by the intelligence community of when the first Soviet ICBM threat was likely to materialize. While the Air Force pressed ahead with its Wizard studies, the Army concentrated on refining its Nike systems, including a new missile known as Nike-Zeus, a sophisticated interceptor originally designed as a third-generation surface-to-air missile to counter an expected Soviet supersonic bomber threat. Toward the end of 1955 Bell Laboratories undertook a feasibility study to determine what would be needed to defend the United States against air and missile attacks in the 1960s. Concluding that the potential for such a capability already existed, Bell Labs recommended turning Nike-Zeus into a terminal/late mid-course ballistic missile defense. But in seeking additional funds for stepped-up engineering development that would lead to initial deployment, the Army made little progress.⁴

(U) The reasons for the slow development of the Nike-Zeus and other BMD programs were several. First and foremost were the technical difficulties of ballistic missile defense, which the Office of the Secretary of Defense (OSD) cited repeatedly in paring service requests for added BMD funding. Scientists and technicians involved in BMD research routinely characterized their problem as nothing less than "hitting a bullet with a bullet." A few early designs, such as some of those developed in connection with an umbrella research effort known as Project Defender, envisioned the use of nonnuclear interceptors colliding with attacking missiles, a concept akin to the more sophisticated kinetic-kill vehicle systems later favored in SDI research. But at the time these early kinetic-kill systems came under study in the 1950s, the high degree of accuracy they would need was

³ Robert Frank Futrell, Ideas, Concepts, Doctrine: A History of Basic Thinking in the United States Air Force, Vol. I, 1907-1960 (Maxwell AFB: Air University, 1989), 500-501.

⁴ Adams, Ballistic Missile Defense, 20, 25; Ernest J. Yanarella, The Missile Defense Controversy: Strategy, Technology, and Politics, 1955-1972 (Lexington, Ky.: University Press of Kentucky, 1977), 27-28.

not forthcoming.⁵ The preferred alternative in most architectures, including the Nike program, involved a direct nuclear counterattack--the coordinated launch of a sizable number of interceptor missiles carrying nuclear explosives, which would detonate in outer space or the upper atmosphere in the vicinity of the incoming warheads and destroy them. However, even this, as the early Nike and Wizard experiments demonstrated, left much to be desired. The major technical limitations of the Nike-Zeus system were its relatively primitive mechanical target-acquisition radars, its inability to differentiate between warheads and decoys, and the slow speed of its interceptor missile--about one-fourth the estimated speed of an ICBM warhead. In short, Nike-Zeus was likely to be easily overwhelmed. The result was a system of dubious reliability and limited military value, still in need of extensive research and development at substantial cost.⁶

(U) A further problem was the lack of clearly defined service responsibilities for ballistic missile defense, which in turn left the administration open to criticism from Congress that the Air Force and the Army were engaging in wasteful duplication. After World War II, the Joint Chiefs of Staff (JCS) had tried to avoid problems of overlapping functions by assigning the protection of broad expanses of sky and territory (commonly termed "area defense") to the Air Force, and the protection of specific targets ("point defense") to the Army.⁷ The distinction worked well for a while in clarifying the air defense mission, but it tended to break down as the services sought to sort out their BMD responsibilities. The general view in Congress was that Wizard and Nike-Zeus were costly competitors for the same job. In a lame effort to restore a semblance of order, Secretary of Defense Charles E. Wilson issued a directive in November 1956 reaffirming the distinction between

⁵ See the summary of Project Defender by John T. Bosma, defense aide to Rep. Ken Kramer (R., Colo.) in Daniel O. Graham and Gregory A. Fossedal, A Defense That Defends: Blocking Nuclear Attack (Old Greenwich, Conn.: Devin-Adair, 1983), 146-152.

⁶ William Schneider, Jr., "Missile Defense Systems: Past, Present, and Future," in John J. Holst and William Schneider, Jr. (eds.), Why ABM? Policy Issues in the Missile Defense Controversy (New York: Pergamon Press, 1969), 4-5.

⁷ See JCS 1620/12, Nov. 7, 1949, sub: Assignment of Responsibility for Guided Missiles, in Richard I. Wolf (ed.), The United States Air Force: Basic Documents on Roles and Missions (Washington, D.C.: Office of Air Force History, 1987), 210.

point and area defense and dividing the BMD job between the Army and the Air Force accordingly.⁸ But because of the vast opportunities that capturing the BMD mission seemed to offer, neither service paid much attention to Wilson's order.

The Post-Sputnik Reaction

(U) The test in August 1957 of the first Soviet ICBM, followed on October 4, 1957, by an even more dramatic event--the launching of the Soviet space satellite Sputnik--compelled both Congress and the Eisenhower administration to take a fresh look at the U.S. space and missile programs. Not only did it appear that the United States had fallen behind the Soviets in these critical areas of strategic technology; it was also obvious that the ICBM threat, once nothing more than speculation, was now an ominous reality and that the United States was nowhere near to having an effective antidote. In facing up to this unsettling situation, Secretary of Defense Neil McElroy (Wilson's recent successor) privately advised President Eisenhower that "he was weighing the idea of a 'Manhattan Project' for the anti-ICBM."⁹

(U) Concern in Congress over the Soviet Union's recent achievements was also acute, with the result that in the ensuing months no fewer than four separate investigations were launched. The most far-reaching was by the Senate Armed Services Preparedness Subcommittee, chaired by Lyndon B. Johnson (D., Texas), one of the Senate's more ambitious members who had had his eye on the presidency for years.¹⁰ On November 25, 1957, the committee initiated hearings amid considerable fanfare. While most of the testimony focused on the status of offensive missiles and the space

⁸ Memo, SecDef for Armed Forces Policy Council, Nov. 26, 1956, sub: Clarification of Roles and Missions, in Alice C. Cole, *et. al.* (eds.), The Department of Defense: Documents on Establishment and Organization, 1944-1978 (Washington, D.C.: Historical Office, Office of the Secretary of Defense, 1978), 309-310.

⁹ Memo by Brig. Gen. Andrew J. Goodpaster, Oct. 11, 1957, [sub: Conference between President and SecDef McElroy, Oct. 11, 1957], Papers of Dwight D. Eisenhower, Ann Whitman File, DDE Diary Series, box 27, Oct. 1957 Staff Notes (2) folder.

¹⁰ For an insightful analysis of Johnson's ambitions, see Robert A. Caro, The Years of Lyndon Johnson: The Path to Power (New York: Knopf, 1982).

program, the committee also wanted information on defensive systems. Seizing the opportunity, the Army used the occasion to lobby for acceleration of its Nike-Zeus antimissile missile program. According to Secretary of the Army Wilber M. Brucker, eighteen months of study by Army missile experts "convinced us that a defense against the ICBM was both technically and economically feasible."¹¹

(U) Shortly after the committee commenced hearings, reports leaked to the press of the recent recommendations of the Gaither committee, a group of defense experts assembled earlier in the year to investigate the country's civil defense program. With an enlarged mandate, it had turned its attention to the condition of U.S. offensive and defensive strategic systems. Among its various recommendations, submitted to President Eisenhower in November 1957, the committee urged early deployment, using existing technology, of an anti-ballistic missile (ABM) system, part of a package of offensive and defensive measures calculated to cost \$24 billion over the next several years.¹² Senator Johnson promptly asked that his panel be provided with a copy of the Gaither report, but the President, citing Executive privilege, refused and by so doing added further to the growing controversy over the country's strategic posture.¹³

(U) As the congressional investigation progressed it became clear that the White House and senior Department of Defense (DoD) officials did not embrace the Army's confident expectation about the early feasibility of an antimissile system. On January 7, 1958, the administration submitted a \$1.37 billion supplemental budget request for stepping up missile and satellite development,

¹¹ U.S. Congress, Senate, Committee on Armed Services, Preparedness Investigating Subcommittee, Hearings: Inquiry into Satellite and Missile Programs, 85:1 and 2 (Washington: G.P.O., 1958), Part I, 463.

¹² See U.S. Congress, Joint Committee on Defense Production, Deterrence and Survival in the Nuclear Age (The "Gaither Report" of 1957), 94:2 (Washington, D.C.: G.P.O., 1976).

¹³ Dwight D. Eisenhower, The White House Years: Waging Peace, 1956-1961 (Garden City, N.Y.: Doubleday, 1965), 222. On the legislative-executive split over the strategic issue at this time, also see S. Nelson Drew, "Expecting the Approach of Danger: The "Missile Gap" As a Study of Executive-Congressional Competition in Building Consensus on National Security Issues," Presidential Studies Quarterly XIX (Spring 1989): 317-335; and Morton H. Halperin, "The Gaither Committee and the Policy Process," in Thomas E. Cronin and Sanford D. Greenberg (eds.), The Presidential Advisory System (New York: Harper and Row, 1969), 185-208.

omitting any mention of additional funds for the antimissile program.¹⁴ Frustrated by this turn of events, the director of the Army's research and development program, Lt. Gen. James M. Gavin, citing the administration's niggardly attitude toward missile defense, announced his retirement. Gavin complained that "there is not one red penny in that budget for the Army and I have been begging for money--money for an antimissile missile, money for a space program."¹⁵

(U) The administration did not share Gavin's sentiments, partly for reasons of practicality, but also because they clashed somewhat with Eisenhower's pledge to pursue a policy of "freedom of space," aimed at avoiding insofar as possible an arms race in outer space. This policy also had strong support in Congress and was at the core of a drive by some members to transfer responsibility for the space program from the military to a civilian-run organization, a process that culminated in the creation of the National Aeronautics and Space Administration (NASA) in October 1958. All the same, Eisenhower and his advisers were dubious that the complete demilitarization of outer space was feasible, or even desirable. According to the Air Force Chief of Staff, General Thomas D. White, speaking publicly shortly after Sputnik, "... there is no division, per se, between air and space. Air and space are an indivisible field of operations."¹⁶ Eisenhower, while openly embracing a rather different policy, essentially agreed. Indeed, as he told a meeting of his senior scientific advisers in February 1958, he was firmly of the opinion "that space objectives relating to Defense are those to which the highest priority attaches because they bear on our immediate safety."¹⁷

(U) Under pressure from nearly all directions, the administration sought a safe middle course. Least of all, given the emergency occasioned by Sputnik and Gavin's criticisms, did it want to give the appearance that it was thwarting progress on antimissile defenses. Whether or not BMD was impractical or whether it might undermine the administration's "freedom of space" policy, it was too

¹⁴ Ltr, Eisenhower to Speaker of the House of Representatives, Jan. 7, 1958, in U.S. Congress, Senate, Committee on Appropriations, Hearings: Supplemental Defense Appropriations Bill, 1958, 85:2 (Washington, D.C.: G.P.O., 1958), 2.

¹⁵ Congressional Quarterly Almanac, 1958, 670.

¹⁶ Quoted in Futrell, Ideas, Concepts, Doctrine, 1907-1960, 550.

¹⁷ Quoted in Paul B. Stares, The Militarization of Space: U.S. Policy, 1945-1984 (Ithaca, N.Y.: Cornell University Press, 1985), 42.

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¹⁵ Congressional Quarterly Almanac, 1958, 670.

¹⁶ Quoted in Futrell, Ideas, Concepts, Doctrine, 1907-1960, 550.

¹⁷ Quoted in Paul B. Stares, The Militarization of Space: U.S. Policy, 1945-1984 (Ithaca, N.Y.: Cornell University Press, 1985), 42.

important an option to be summarily ruled out. Accordingly, the Office of the Secretary of Defense launched several initiatives. First, in mid-January 1958, it endeavored to settle once and for all the dispute over service functions by giving most of the BMD mission to the Army. Henceforth the Army was to proceed with engineering development of the Nike-Zeus missile system, including the launch systems, radar control, and other electronic components "as a matter of urgency"; the Air Force was to continue development only of those portions of the Wizard system that might provide improved capabilities in the forward acquisition radars, in discrimination techniques, and in the processing of radar data. All Air Force-sponsored contributions in these areas were to be compatible with Nike-Zeus.¹⁸ But in looking over this allocation of responsibilities, the chairman of the House Armed Services Committee, Carl Vinson, known for his strong pro-Navy and anti-Air Force views, expressed disappointment that the administration had not gone further by eliminating the Air Force entirely and by giving the Army full authority over BMD, operational as well as developmental.¹⁹

(U) In an effort to deflect further criticism, OSD unveiled on February 7, 1958, the creation of the Advanced Research Projects Agency (ARPA), an elite research and development organization with a strong mandate to bring competing service programs into line. Initially, ARPA acquired broad jurisdiction over the U.S. space program and all advanced missile research, including BMD. Although ARPA was soon stripped of its space program responsibilities because of the creation of NASA, monitoring ballistic missile research, including the Army's Nike-Zeus program and more advanced BMD systems, would remain for the next decade or more one of the agency's primary functions.²⁰

(U) The Democratically-controlled Congress, meanwhile, appeared bent on setting its own agenda, reacting to opinion polls that showed widespread public dissatisfaction with the

¹⁸ SCAS, Inquiry into Satellite and Missile Programs, Pt. 3, 2319.

¹⁹ Futrell, Ideas, Concepts, Doctrine, 252; United States Defense Policies in 1958, 86:1, p. 21.

²⁰ Richard J. Barber Associates, The Advanced Research Projects Agency, 1958-1974 (Washington, D.C.: Advanced Research Projects Agency, Dec. 1975), Ch. I, pp. 7-8.

administration's defense policies.²¹ On January 23, 1958, the Senate Preparedness Subcommittee concluded the initial phase of its hearings and issued a preliminary report containing seventeen recommendations for specific action. Number three on the list urged the administration to: "Put more effort into developing antimissile missiles."²² Subsequently, in acting on the administration's supplemental budget request, Congress earmarked an additional \$40 million in previously appropriated funds for the Army to accelerate ballistic missile defense. But despite growing support in Congress for stepping up the program, the administration, hoping to hold down defense spending, insisted that there was no urgent need or useful purpose for the money. The next year, Congress again increased the Army's BMD budget, this time by \$137 million. But after further reviewing the Nike-Zeus program, President Eisenhower notified Congress that he had decided not to spend the extra money pending completion of certain "essential phases" of testing.²³

(U) At this stage in the history of BMD development, the factors at work in congressional thinking were still relatively simple and straightforward. Although the BMD debate of the late 1950s bore obvious signs of verging on a partisan split, with Democrats more in favor of accelerating the program than Republicans, ballistic missile defense never reached the point of becoming a cause celebre with members of either party. Rather, it was an issue that most in Congress approached as "honest brokers," balancing one need against another. As Senator Leverett Saltonstall (R., Mass.) described it:

The problem . . . every year, as I see it, is to balance the top priorities between defensive weapons and the top priorities between offensive weapons. The great problem is to decide how much to put into defense when we have these overall problems of offense, of building up the Strategic Air Force, the missiles, the new procurement of the Army and so on.²⁴

²¹ See for example the Gallup poll released Nov. 24, 1957, showing a majority of those polled (53%) expressing the need for a "new look" at American defense policies in the light of the recent Soviet space achievement. George H. Gallup, The Gallup Poll: Public Opinion, 1935-1971 (N.Y.: Random House, 1972), II, 1526.

²² "Senators Offer Program to Win 'Survival Race,'" New York Times, Jan. 24, 1958.

²³ "Annual Budget Message to the Congress: Fiscal Year 1961," Jan. 18, 1960, Public Papers of the Presidents of the United States: Dwight D. Eisenhower, 1960-1961 (Washington, D.C.: G.P.O., 1961), 55.

(U) A further consideration, nurtured by the Air Force and generally concurred in by those in charge of the Pentagon's R&D efforts, concerned the apparent superiority of offensive strategic systems over defensive ones, and the likelihood that this balance favoring the offense would persist for the indefinite future. Having largely lost out to the Army in their competition for the BMD mission, the Air Force sought to convince Congress that investment in offensive strategic weapons was more cost effective than the Army's Nike-Zeus. According to Assistant Secretary of the Air Force Richard E. Horner, "The problem is that every solution comes out to be far more expensive to shoot down a ballistic missile than to launch it." And, he added: "... the technical breakthroughs which have been provided to the offense have created a situation where the offensive capability is easier and cheaper to provide than the defensive capability ... it is better in this circumstance to emphasize the offense rather than the defense." Summing up what he had heard from various administration witnesses about the advantages of offense over defense, Congressman William E. Minshall, Jr. (R.-Ohio) assessed the results as "overwhelmingly against Nike-Zeus."²⁵

(U) Defenders of Nike-Zeus drew different conclusions. At the time (and up until the late 1960s) Soviet reentry vehicles had poorly designed aerodynamics. In the atmosphere they decelerated at 100 times the force of gravity, slowing to subsonic speeds at 20,000 feet and leaving in their wake a large radar signature that made them easier targets than aircraft.²⁶ Most analysts agreed, however, that protection of "soft" targets, i.e., cities, required interception of attacking warheads at 100,000 feet or more. A detonation below that level was certain to cause serious damage on the ground. But given the prevailing tenor of scientific opinion and strategic thinking, it was by no means easy for the Army to make a convincing case for Nike-Zeus or to generate and maintain strong and consistent congressional support for the program. Although there were those in Congress, mostly Democrats in the House, like Representatives Daniel J. Flood of Pennsylvania, and Overton

²⁴ Comments by Sen. Leverett Saltonstall (R.-Mass.), in U.S. Congress, Senate, Committee on Armed Services, Preparedness Investigating Subcommittee, Hearings: Missiles, Space, and Other Major Defense Matters, 86:2 (Washington, D.C.: G.P.O., 1960), 244.

²⁵ U.S. Congress, House, Committee on Appropriations, Hearings: DoD Appropriations for 1960, 86:1, Part 6 (Washington, D.C.: G.P.O., 1959), 165, 167, 424.

²⁶ See B. Bruce-Briggs, The Shield of Faith (New York: Simon and Schuster, 1988), 141-142.

Books of Louisiana, who thought the administration was not moving fast enough, the vast majority accepted the administration's view that the state of the art in ballistic missile defense did not justify a decision to begin production and deployment. And while Congress was willing to step up BMD funding, the amounts appropriated were exceedingly modest compared with what the Army estimated was needed--an initial investment, over and above development costs, of \$700 million.²⁷ Congress may have accepted the need for ballistic missile defense in principle, but in looking at the realities of the situation it tended to agree that the time had not yet come for a program of full-scale production and deployment.

The McNamara Era and the Decision to Deploy ABM

(U) Contrary to the expectations of BMD enthusiasts in Congress, the election of John F. Kennedy, a Democrat, to the presidency in 1960 did not result in early decision for production and deployment of an antiballistic missile system. During the campaign, Kennedy had stressed the need for stepped up defense preparedness, including an accelerated ballistic missile program to counter what he alleged to be a "missile gap" with the Soviets. The impression Kennedy left was that he would seek across-the-board improvements in the nation's defense posture. But in fact, the question of ballistic missile defense received little attention during the campaign and was one of those issues he hoped to sidestep. When his Secretary of Defense, Robert S. McNamara, appeared before Congress early in 1961 to present the new administration's budget proposals, it was with the full expectation that the absence of plans to accelerate BMD, along with elimination of the Air Forces' B-70 bomber program, would encounter the most criticism.²⁸

(U) Like Eisenhower, Kennedy won favor among many members of Congress by expressing a sincere commitment to the peaceful uses of outer space. Not only did he accelerate the space program, with the aim of landing a man on the moon by the end of the decade, but also he

²⁷ Congressional Quarterly Almanac, 1960, 375.

²⁸ U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1962, 87:1 (Washington, D.C.: G.P.O., 1961), 46.

reaffirmed a proposal Eisenhower had made advocating a ban on the deployment of "weapons of mass destruction" in outer space, a measure designed both to counter Soviet propaganda and to curb suspected Soviet development of a space-based fractional orbital bombardment (FOB) system. Early on in his presidency, Kennedy overruled an NSC recommendation opposing a declaratory ban on weapons in space that his military advisers deemed unverifiable. As a result of his decision, Kennedy set in motion a process that culminated in 1963 with the adoption by the United Nations General Assembly of a resolution endorsing statements of intent by both the United States and the Soviet Union "not to station in outer space any objects carrying nuclear weapons or other kinds of weapons of mass destruction." Four years later the United States and the Soviet Union signed the Outer Space Treaty, turning the declaratory ban into a formal agreement.²⁹

(U) In no way did these measures hinder or inhibit either the U.S. or Soviet ballistic missile defense programs, nor were they ever meant to. Rather, on the U.S. side, they reflected an increasingly two-track policy that sought the peaceful exploration of space, on the one hand, while enjoying the security benefits that defense systems operating in space had to offer. This included not only ballistic missile defenses, but also reconnaissance satellites for intelligence-gathering, neither of which fell into the category of "weapons of mass destruction." That Nike and most other ballistic missile defenses under study in both the United States and the Soviet Union relied on ground-based launchers and radars, made it all the easier to overlook their potential complications for keeping the heavens free of weaponry. Not until the launching of SDI in the 1980s, with its emphasis on space-based components, would this tacit separation of peaceful and military pursuits in space appear seriously threatened, thus fueling a renewed debate around the militarization-of-space issue.

(U) During McNamara's tenure as secretary of defense (1961-1968), however, the debate over "freedom of space" took second place to other concerns in Congress and the Pentagon affecting ballistic missile defense. Although his annual reports routinely termed BMD "the highest national priority," McNamara himself was personally skeptical of ever being able to design and build an

²⁹ Raymond L. Garthoff, "Banning the Bomb in Outer Space," *International Security* 5 (Winter 1980-81): 25-40; Stares, *Militarization of Space*, 82-90.

effective, worthwhile system that would protect the entire United States. The major problems were, of course, still technical, but there were political hurdles as well, especially overcoming the reluctance of Congress and the American public to support what he deemed essential damage-limiting companion measures like a nationwide fallout shelter program.³⁰ As he once explained during a press conference: "A fallout shelter program can stand alone and be justified independently of an anti-ballistic missile system. . . . But an anti-ballistic system cannot stand alone without a fallout shelter system."³¹

(U) Such a system, however, never materialized. Twice--in 1962 and again the following year--McNamara asked Congress for legislation and appropriations to mount a nationwide fallout shelter effort, only to be rebuffed both times. In addition to the expense, many in Congress simply considered fallout shelters, like the proverbial ostrich hiding its head in the sand, contrary to the American ethos of facing problems directly. By 1964, McNamara conceded defeat.³² And with ABM cost estimates steadily rising at the same time, his skepticism of the whole idea of strategic defense deepened appreciably. "There is clearly no point," he finally acknowledged, "in spending \$40 billion [for construction and deployment of a BMD system] if it is not going to buy us a significant improvement in our security. If it is not, then we should use the substantial resources it represents on something that will."³³

(U) The alternative that McNamara eventually embraced--and which would remain the cornerstone of American security policy for the next several decades--was a strategy of deterrence through the threat of "assured destruction." Siding with those who saw offensive systems as likely to remain superior to defensive ones, McNamara stressed the need for a strong and relatively invulnerable assured destruction retaliatory force that came to include, by the end of the decade,

³⁰ Yanarella, Missile Defense Controversy, 54.

³¹ Press Conference, Mar. 4, 1964, quoted in Harry B. Yoshpe, Our Missing Shield: The U.S. Civil Defense Program in Historical Perspective (Washington, D.C.: Federal Emergency Management Agency, 1981), 374.

³² *Ibid.*, 360-375.

³³ Robert S. McNamara, The Essence of Security: Reflections in Office (New York: Harper and Row, 1968), 64.

1,000 silo-based Minuteman ICBMs, 54 Titan IIs (also silo-housed), 41 Polaris nuclear submarines, and a fleet of around 400 strategic bombers, mostly aging B-52s. With such a force in being, McNamara assured Kennedy, the United States would have the "ability to destroy, after a well-planned and executed Soviet surprise attack on our Strategic Nuclear Force, the Soviet government and military controls, plus a large percentage of their population and economy (e.g. 30% of their population, 50% of their industrial capacity, and 150 of their cities)."³⁴

(U) Despite scattered rumblings of discontent from Capitol Hill, the absence of a groundswell of popular opinion in favor of expediting ballistic missile defense left proponents of the program little choice other than to accept the administration's recommendations.³⁵ Accordingly, during the early 1960s Congress went along with McNamara's budget proposals that postponed deployment indefinitely and limited the BMD program only to research and development. This included not only the Army's ongoing Nike-Zeus program but also several other important studies sponsored by the Advanced Research Projects Agency.³⁶ Among the more promising of these ARPA studies were the previously mentioned Project Defender, described as a "crash R&D" effort started in the Eisenhower administration, with emphasis now on improving tracking and intercept capabilities through the application of newly developed phased-array radars and other state-of-the-art sensors; and Project BAMBI (for Ballistic Missile Boost Intercept), a more forward-looking effort for possible deployment in the mid-1970s using space-based satellite interceptors to destroy Soviet ICBMs in their early launch phase. But like many other ambitious ARPA projects, BAMBI never left the drawing board.³⁷

³⁴ Draft Memo, McNamara for the President, Dec. 6, 1963, sub: Recommended FY 1965-1969 Strategic Retaliatory Forces, DoD/FOIA Collection, Pentagon.

³⁵ Edward Randolph Jayne II, "The ABM Debate: Strategic Defense and National Security," (Ph.D. Dissertation, Massachusetts Institute of Technology, 1969), 120-121.

³⁶ U.S. Department of Defense, Annual Report for Fiscal Year 1961 (Washington, D.C.: G.P.O., 1962), 13.

³⁷ Yanarella, Missile Defense Controversy, 74-75; Philip J. Klass, "Missile Defense Keyed to Technology," Aviation Week and Space Technology, Apr. 19, 1982: 79, 81.

(U) In 1963 a convergence of events gave new impetus to the ballistic missile defense program. First, after examining promising new data, McNamara decided to downgrade Nike-Zeus in favor of a more sophisticated system being developed for the Army, Nike-X. Incorporating the fruits of the Defender studies on phased-array radars and the development of a faster interceptor, the Sprint missile, Nike-X promised to be more effective in sorting out decoys from attacking warheads, one of the principal weaknesses of Nike-Zeus.³⁸ Proponents of BMD in Congress applauded McNamara's decision, viewing it as a major breakthrough that would pave the way for production and deployment in the near future. In recommending full funding for Nike-X research, the House Appropriations Committee described the need for such a system as "most urgent."³⁹

(U) Contributing to the concern in Congress was the confirmation that the Soviet Union was also working on a ballistic missile defense system. Although Western intelligence had suspected for some time that the Soviets had a BMD program under development, solid evidence prior to the improved satellite intelligence-gathering methods of the 1960s was sketchy, limited mainly to interviews with captured German scientists returning to the West and a handful of U-2 photographs taken in April 1960 of construction near Sary Shagan, a small village on the edge of Lake Balkash in Central Asia.⁴⁰ Subsequently, in October 1960, the New York Times, citing Pentagon sources, reported that a Soviet antimissile program was "a matter of fact."⁴¹ Although the project in question--a rudimentary ABM near Leningrad--was soon abandoned, it gave rise to considerable speculation in the West, much of it apparently fueled intentionally by the Soviets themselves. In October 1961, for example, Soviet Defense Minister Marshal Rodion Malinovsky boasted: "The problem of destroying enemy missiles in flight has been successfully resolved."⁴² And, as if to

³⁸ Schneider, "Missile Defense Systems," 5.

³⁹ H. Rpt. No. 88-439, p. 8.

⁴⁰ Sayre Stevens, "The Soviet BMD Program," in Ashton B. Carter and David N. Schwartz (eds.), Ballistic Missile Defense (Washington, D.C.: Brookings, 1984), 191-192.

⁴¹ "U.S. Says Russians Plan Anti-Missile," New York Times, Oct. 15, 1960.

⁴² Pravda, Oct. 25, 1961, quoted in Strobe Talbott, Master of the Game: Paul Nitze and the Nuclear Peace (New York: Knopf, 1988), 91.

demonstrate their confidence, the Soviets in November 1963 paraded a prototype antimissile missile through Red Square.⁴³

(U) Reacting to evidence of Soviet progress in ballistic missile defense, a tacit alliance of Republicans and conservative Democrats in Congress began putting steadily growing pressure on the administration to step up the pace of the U.S. BMD program. By 1966 the pro-ABM faction had reached the point where it appeared poised to seize the initiative if the administration failed to act. At the same time, it was increasingly apparent that the Joint Chiefs were also dissatisfied with some of McNamara's policies, including his go-slow approach to missile defense. Although McNamara continued to urge research and development only, the Senate Armed Services Committee, citing the advice of the JCS, added \$167.9 million to the Army's FY 1967 Nike-X authorization, bringing the total for the program to nearly \$600 million. Included was \$153.5 million designated for preproduction activity that would save about a year in attaining an operational capability.⁴⁴ In acting on the spending bill, the House Appropriations Committee included a provision, subsequently enacted, specifically earmarking these funds for Nike-X procurement, just in case the administration decided, as it had indicated it might, to use the money for something else.⁴⁵

(U) Although there were other pressures at work as well, including confirmation in November 1966 that the Soviets were building a new ABM system around Moscow,⁴⁶ it seems clear that congressional preferences, as indicated by House and Senate action on the FY 1967 defense budget, played a key role in convincing the administration that the time had finally come for a decision on BMD deployment. Matters came to a head on December 6, 1966, at a meeting in Austin, Texas, between President Lyndon B. Johnson and his principal national security advisors. While McNamara and Deputy Secretary of Defense Cyrus Vance argued against Nike-X deployment, the Joint Chiefs and the President's National Security Advisor, Walt W. Rostow, argued for it. The

⁴³ Lawrence Freedman, U.S. Intelligence and the Soviet Strategic Threat, 2d ed. (Princeton, N.J.: Princeton University Press, 1986), 92.

⁴⁴ S. Rpt. No. 89-1136, pp. 4-5.

⁴⁵ H. Rpt. No. 89-1652, p. 22.

⁴⁶ John Prados, The Soviet Estimate (New York: Dial, 1982), 160-161.

upshot was a compromise of sorts proposed by McNamara involving the inclusion in the next year's defense budget of standby financing for Nike-X production pending Soviet response to an offer to open talks on limiting strategic weapons, with curbing the growing competition in defensive systems the first priority. Clearly, if events went as McNamara hoped, he would soon rid himself of the ABM problem by turning it into an arms-control bargaining asset.⁴⁷

(U) In his State of the Union message on January 10, 1967, President Johnson unveiled his intention to seek arms control negotiations with the Soviets in lieu of a further buildup of strategic weapons.⁴⁸ A few days later he presented his annual budget message, requesting appropriation of approximately \$375 million to begin Nike-X procurement should U.S.-Soviet talks prove abortive.⁴⁹ Acting on the administration's request, the Senate Armed Services Committee cautiously endorsed the arms control initiative but urged prompt deployment of an ABM system if no agreement were reached "within a reasonable period."⁵⁰ The House Armed Service Committee took a tougher line. It urged immediate deployment of a limited, or "thin," ABM system without regard to negotiations, arguing that deterrence by offensive systems alone was not enough. "Should the Soviets come to believe," the committee maintained,

that their ballistic missile defense, coupled with a nuclear attack on the United States, would limit damage to the Soviet Union to a level acceptable to them, whatever that level is, our forces would no longer deter, and the first principle of our security policy would be gone.⁵¹

⁴⁷ Robert S. McNamara, Blundering Into Disaster (N.Y.: Pantheon Books, 1986), 55-56; John Newhouse, Cold Dawn: The Story of SALT (N.Y.: Holt, Rinehart and Winston, 1973), 86; and Memo for the Files by Paul H. Nitze, Mar. 12, 1969, sub: Telephone Conversation with Robert McNamara, Nitze Papers, CMPDP: Misc. Correspondence folder, Library of Congress.

⁴⁸ "Annual Message to the Congress on the State of the Union," Jan. 10, 1967, Public Papers of the Presidents of the United States: Lyndon B. Johnson, 1967 (Washington, D.C.: G.P.O., 1968), I, 10-11.

⁴⁹ "Annual Budget Message to the Congress, FY 1968," Jan. 24, 1967, *ibid*, 48.

⁵⁰ S. Rpt. No. 90-76, pp. 4-5.

⁵¹ H. Rpt. No. 90-221, pp. 3-4.

(U) As it turned out, the Soviets were initially cool to American suggestions of arms control talks if defensive weapons were to be the main topic. Of more apparent concern to the Soviets was reported American progress in offensive systems, especially U.S. development of multiple independently-targeted reentry vehicles (MIRVs) which would significantly enhance the capacity of offensive missiles to overcome any available or foreseeable defense. At the hastily arranged Glassboro, New Jersey, summit in June 1967, Soviet Premier Aleksei N. Kosygin was noncommittal about negotiations and visibly hostile to the idea, floated by McNamara, that they should focus on defensive systems first. "Kosygin was furious," McNamara recalled. "The blood rushed to his face, he pounded the table, and he said 'Defense is moral; offense is immoral.' That was essentially the end of the discussion."⁵²

(U) With Glassboro having dashed any hope of starting arms talks in the foreseeable future, McNamara and the President returned to Washington with no real choice other than to move ahead with ABM deployment. What remained to be seen was how extensive the ABM program would be. Citing Soviet ABM activity and progress in the American program, the Joint Chiefs urged a "thick" area-wide defense deployment.⁵³ McNamara, in contrast, remained dubious. Not surprisingly, he tried to minimize any deployment as much as possible by opting for a limited, or "light," program, confined to combating the remote possibility of accidental launches and the predicted threat (modest at best) of a Communist Chinese ICBM capability in the 1970s. In an extraordinary speech delivered in San Francisco on September 18, 1967, he defended his decision on the grounds that only "a fully credible offensive assured destruction capability," not "a massive, costly, but highly penetrable ABM shield," held the key to deterrence and American security. "In point of fact," he argued, alluding to his recent decision (then as yet undisclosed) to expedite MIRV development, "we have already initiated offensive weapons programs costing several billions in order to offset the small present Soviet ABM deployment, and the possibly more extensive future Soviet ABM deployments." But his main concern was to avert, as he saw it, an expensive and ultimately futile competition with the

⁵² McNamara, Blundering Into Disaster, 57.

⁵³ Freedman, U.S. Intelligence and the Soviet Strategic Threat, 123.

Soviets in defensive strategic weapons. "It is precisely this action-reaction phenomenon," he insisted, "that fuels an arms race."⁵⁴

(U) In the history of the U.S. ballistic missile defense effort, McNamara's San Francisco speech was a major milestone, the first overt commitment by an administration to go beyond laboratory research and occasional experiments and to embark on the deployment of an operational ABM system. But it was also, as McNamara made clear, a vote of "no confidence" of being able to realize any significant results anytime soon based on existing technologies. The effect, when coupled with growing divisions over the Vietnam War, was to polarize opinion, both in Congress and in the public at large, as to the wisdom and advisability of going ahead with the ballistic missile defense program, making it, next to Vietnam, the most hotly debated national security issue over the next several years.

(U) The polarization in Congress was most evident in the Senate, where the cleavage was mainly between "liberals" and "conservatives," rather than along party lines. The distinction was not always precise, but it generally accorded with members' preferences on a variety of foreign and domestic issues, with liberals opposed to or skeptical of BMD, and conservatives in favor. Leading the battle for ballistic missile defenses were many long-time pro-defense members of the Senate Armed Services Committee, including Richard Russell (D., Ga.), chairman of the committee, John Stennis (D., Miss.), Strom Thurmond (R., S.C.), and Henry Jackson (D., Wash.). In addition to being strong advocates of ABM, all were supporters of the Johnson administration's policy in Vietnam.⁵⁵

(U) Liberal opponents of ABM found a home in the Senate Foreign Relations Committee. This group, composed of J. William Fulbright (D., Ark.), the committee's chairman, Edward Kennedy (D, Mass.), Albert Gore (D., Tenn.), John Sherman Cooper (R., Ky.), and several others, was also at the center of the growing congressional opposition to the Vietnam war. Their aim was not only to block ABM deployment but also, if possible, to do away with ballistic missile defense

⁵⁴ McNamara speech before the United Press International Editors and Publishers, Sep. 18, 1967, Public Statements of Secretary of Defense Robert S. McNamara, 1967, Vol. VII, pp. 2546-2570.

⁵⁵ Schwartz, "Past and Present," 340.

altogether, most often echoing McNamara's arguments that missile defense was a poor investment; that reliance on offensive weapons and the threat of assured destruction was a more effective strategy; and that an American ABM could ignite a new arms race.⁵⁶

(U) As expected, the administration's decision to seek initial authorization and funding for the "light" BMD system, now called Sentinel, set off a storm of protest when the matter came before Congress early in 1968. On a number of occasions--four times in the Senate and three times in the House--the anti-ABM coalition tried to delete or delay funding. Although all seven attempts failed, it was clear from the close vote in several instances that opposition to Sentinel was on the rise and that its future deployment was by no means assured.⁵⁷

(U) Thus, as the Johnson administration drew to a close, there was still no firm consensus on how or even whether the United States should proceed on ballistic missile defense. Heretofore, since the launching of Sputnik, the political initiative had rested for the most part with BMD proponents, who over the years had voted some \$3.5 billion in R&D to move the program along.⁵⁸ But by the end of the 1960s, a variety of factors--continuing technical difficulties, escalating costs, the competing demands of other programs, lukewarm support from the Executive Branch, and growing anti-military sentiment in Congress generated by the frustrations of Vietnam--suggested that, as a viable political issue, ballistic missile defense was losing ground. As it happened, the contest had barely begun.

The ABM Debate

(U) When Richard M. Nixon assumed the presidency in January 1969, he gave top priority to a full review of U.S. defense policy, with Deputy Secretary of Defense David Packard named to

⁵⁶ *Ibid.*

⁵⁷ Congressional Quarterly Almanac, 1968, 585.

⁵⁸ The figure of \$3.5 billion is total expenditures through FY 1968. See U.S., Congress, Senate, Committee on Foreign Relations, Hearings: Strategic and Foreign Policy Implications of ABM Systems, 91:1 (Washington, D.C.: G.P.O., 1969), 296.

spearhead a special interagency study of the ABM question.⁵⁹ Although funds for initial Sentinel site construction had been approved, the close votes in Congress the year before suggested that going ahead with the program would be an uphill struggle. Instead of gaining adherents, the Sentinel seemed to be losing them, leading to increased speculation in the press that a major confrontation was in the offing.⁶⁰

(U) At the same time, Nixon also wanted to explore his options in the arms-control field, which appeared to hold significant new opportunities. After their initial hesitation at Glassboro, the Soviets in June 1968 had indicated an interest in face-to-face arms control talks. But as a way of registering his protest over the Soviet invasion of Czechoslovakia later that summer, President Johnson had canceled the talks.⁶¹ Now, with a new administration in office, arms control prospects appeared to brighten, with ballistic missile defense, in Nixon's view, a necessary part of the agenda.

(U) In essence, Nixon regarded ABM in much the same light as did McNamara--a technology whose diplomatic value for bargaining purposes exceeded its military utility. "I felt that tactically," Nixon later wrote, "we needed the ABM as a bargaining chip for negotiations with the Soviets: they already had an ABM system, so if we went into negotiations without one we might have to give up something else, perhaps something more vital."⁶² Operating on this premise, Nixon resolved to seek congressional authorization not just for more research but for actual deployment of an ABM system.

(U) On March 14, 1969, Nixon made known his decision, drawn from the findings of the Packard inquiry, to recommend to Congress a "substantially modified" version of the Sentinel ABM

⁵⁹ Henry Kissinger, The White House Years (Boston: Little, Brown, 1979), 205.

⁶⁰ See for example "Confrontation Between Nixon and Kennedy Is Developing Over Deployment of Antimissile System," New York Times, Mar. 6, 1969.

⁶¹ Lyndon Baines Johnson, The Vantage Point: Perspectives of the Presidency, 1963-1969 (New York: Holt, Rinehart and Winston, 1971), 485-489.

⁶² Richard Nixon, RN: The Memoirs of Richard Nixon (New York: Grosset and Dunlap, 1978), 416.

system.⁶³ Renamed Safeguard, this new system would be oriented initially toward the defense of remotely located U.S. ICBM fields rather than population centers, a policy change designed to appease urban residents who were uneasy at the prospect of seeing the skies above their homes become a nuclear battlefield. Congressional opponents of ballistic missile defense, on the other hand, saw this altered deployment scheme working to their advantage. As one House critic, Rep. Lucien N. Nedzi (D., Mich.), argued, the program's shifting objectives raised questions about its ultimate purpose. "I have diligently examined the pros and cons of the ABM proposals," he insisted, "and there is one point, at least, that is uncontroversial: proponents of the ABM have used and often abandoned one argument after another. . . . Pretty soon you get the idea that the real reason for deployment is because someone wants to deploy it, no matter what."⁶⁴

(U) As Nedzi's remarks suggested, the ABM debate that followed Nixon's decision was to prove intense, often emotional, and wearing to both sides. As a foretaste of the later controversy over SDI, the debate also saw the emergence for the first time of well organized and well financed private lobbying groups, both for and against the issue, that sought to sway public and congressional opinion. Although national opinion polls showed no strong sentiment one way or the other, grassroots opposition to Safeguard sprang up quickly in cities like Seattle, Chicago, and Boston where church, peace, and disarmament groups were already well established and active.⁶⁵ The better organized anti-ABM groups like the National Citizens Committee Concerned About Deployment of the ABM, co-chaired by former U.N. Ambassador Arthur Goldberg and former Deputy Secretary of Defense Roswell Gilpatric, tended to be predominantly Democratic in membership, with a strong liberal bias.⁶⁶ Many also worked closely with ABM opponents in Congress, like Senator Edward

⁶³ "Statement on Deployment of the Antiballistic Missile System," Mar. 14, 1969, Public Papers of the Presidents of the United States: Richard Nixon, 1969 (Washington, D.C.: G.P.O., 1971), 216-219.

⁶⁴ Congressional Record, Oct. 2, 1969, p. 28111.

⁶⁵ Congressional Quarterly Almanac, 1969, 1091, 1093; Yanarella, Missile Defense Controversy, 146-147.

⁶⁶ See "A New Coalition Will Oppose ABM," New York Times, Mar. 30, 1969; and "National Committee Is Formed to Oppose the ABM," *ibid*, Apr. 18, 1969.

Kennedy, whose efforts to defeat the program extended to sponsorship of a volume of essays intended to demonstrate on scientific and strategic grounds that the administration's proposed ABM system was neither reliable nor necessary. But despite the distribution of numerous complimentary copies, it is unclear whether the book was ever widely used and read other than by those who were already against ABM.⁶⁷

(U) The lobbying effort on behalf of ABM was more low-keyed but, in the end, more successful. This included contributions by several large ABM contractors--Motorola, General Electric, and Lockheed--to the Chicago-based American Security Council, which sponsored mailings and radio broadcasts in favor of ABM;⁶⁸ and the formation of an organization calling itself the Committee to Maintain a Prudent Defense Policy, chaired by former Secretary of State Dean Acheson. Among the committee's other organizers were Albert Wohlstetter, a noted strategic analyst with the Rand Corporation, and Paul H. Nitze, Deputy Secretary of Defense in the Johnson administration and soon to be named a member of the U.S. Strategic Arms Limitation Talks (SALT) delegation. Subsequently, in the 1980s, Nitze would reemerge as an advisor in the Reagan administration to play a key role in formulating the policy behind SDI. As the committee's leading spokesman during the ABM debate, Nitze argued in favor of the Safeguard system chiefly on the grounds that it would doubtless improve the U.S. negotiating position in the upcoming arms control talks.⁶⁹

(U) The principal battleground over ABM was in the Senate, where both the Foreign Relations and Armed Services Committees held lengthy hearings over the Safeguard authorization bill. When the matter finally reached the Senate floor in August, polarization of opinion had reached the point where the outcome could have gone either way. With conservatives united behind the measure and liberals closing ranks against it, the balance of power fell to Senate moderates,

⁶⁷ See Abram Chayes and Jerome B. Wiesner (eds.), ABM: An Evaluation of the Decision to Deploy an Antiballistic Missile System (New York: Harper and Row, 1969).

⁶⁸ Congressional Quarterly Almanac, 1969, 1092.

⁶⁹ Nitze statement, Apr. 22, 1969, U.S., Congress, Senate, Committee on Armed Services, - Hearings: Authorization for Military Procurement, Research and Development, Fiscal Year 1970, and Reserve Strength, 91:1 (Washington, D.C.: G.P.O., 1969), 1112.

setting a pattern for what would later become the general alignment of forces in similar struggles over SDI. In the end, the ABM authorization cleared the Senate by the narrow margin of a single vote, a tie-breaker cast by Vice President Spiro Agnew. Although the vote taken later in the House to uphold the Senate's action was much less close, the drama of the debate was no less intense. In short, even while giving its consent for Safeguard to go ahead, Congress was still groping for a consensus.⁷⁰

Congress and the ABM Treaty

(U) Despite its victory in the 1969 ABM debate, the Nixon administration realized that sentiment in Congress was turning against ABM. Over the next few years ABM opponents, while still a minority, kept up steady pressure to curtail deployment and to "reorder national priorities," a euphemism for reducing defense expenditures while increasing domestic spending. Although they failed in 1970 in another bid to kill the ABM program, they succeeded the following year in limiting construction to only two of twelve originally planned deployment sites.⁷¹ Even previously stalwart advocates of ABM, like Stennis of Mississippi, were starting to have second thoughts. Stennis worried that the ABM issue was "souring" the entire defense appropriations debate, making it harder to secure action on other pressing legislation.⁷²

(U) Faced with this general erosion of congressional support for ABM, the Nixon administration sought to salvage what it could by making ballistic missile defense the centerpiece of its arms control negotiating strategy. At the same time, by the early 1970s, the Soviet Union, which had previously lagged behind the United States in offensive strategic weapons systems, was beginning to pull abreast, if not ahead, in both land-based ICBMs and submarine-launched ballistic

⁷⁰ The most detailed summary of the Senate and House debates is in Congressional Quarterly Almanac, 1969, 257-274. Also see Fred Kaplan, The Wizards of Armageddon (New York: Simon and Schuster, 1983), 343-355.

⁷¹ Yanarella, Missile Defense Controversy, 158-160; Congressional Quarterly Almanac, 1971, 314-316, 327.

⁷² Stennis quoted in Kissinger, White House Years, 811.

missiles (SLBMs). Only in long-range bombers did the United States still command a decisive numerical and technical advantage. Obviously bolstered by their recent accomplishments, the Soviets now reversed themselves and suggested that SALT give priority to negotiating a permanent agreement limiting defensive weapons, leaving offensive systems for later discussions. On May 20, 1971, Nixon publicly confirmed his acceptance of this formula.⁷³ However, it was not until May 1972 that the deal was finally consummated with the signing in Moscow of the ABM Treaty and a companion SALT I interim agreement imposing a "freeze" on the number of offensive strategic launchers pending conclusion of a permanent replacement accord in SALT II.⁷⁴

(U) For many in Congress the 1972 ABM Treaty was a welcome relief not only because it seemed a significant step in capping the arms race, but also because it appeared to remove one of the more vexing issues that had plagued Capitol Hill for nearly a decade and a half. Although the treaty did not abolish ballistic missile defenses, it limited those in existence, including launchers, missiles, and associated radars, to no more than two ABM deployment areas (reduced to one in 1974) in each country, thus making a nationwide system of protection virtually impossible. Deployment in the future of additional systems developed from "other physical principles" (terms not defined) was strictly prohibited, though R&D leading to their possible creation was not. Left unclear in what would later become one of the major controversies surrounding SDI was how far this process of creation could go before violating the treaty.⁷⁵

(U) Proponents of arms control seized on the ABM treaty as marking a breakthrough that would soon yield a more stable strategic relationship between the United States and the Soviet Union. By leaving both sides virtually naked to ballistic missile attack, the treaty encouraged the

⁷³ Nixon, RN, 523-524.

⁷⁴ The best first-hand accounts of how the SALT I agreements were reached are Gerard Smith, Doubletalk: The Story of SALT I (Garden City, N.Y.: Doubleday, 1980); and Paul H. Nitze, with Ann M. Smith and Steven L. Rearden, From Hiroshima to Glasnost: At the Center of Decision--A Memoir (New York: Grove, Weidenfeld, 1989), Chs. 16-17. Also see John Newhouse, Cold Dawn: The Story of SALT (New York: Holt, Rinehart and Winston, 1973).

⁷⁵ For the text of the ABM Treaty, see U.S. Arms Control and Disarmament Agency, Arms Control and Disarmament Agreements: Texts and Histories of Negotiations (Washington, D.C., 1982), 139-147.

belief, shared by many in Congress, that the operating strategic philosophy, both in Washington and Moscow, was now one of deterrence based on mutual assured destruction (MAD). It was not until a few years later, with confirmation that the Soviet strategic buildup was substantially larger and more sophisticated than U.S. intelligence had originally predicted, that skeptics began to question Soviet acceptance of MAD and to look for ways of redressing the strategic balance, a process that would help give rise to SDI.

(U) Unlike the 1969 debate, the outcome of congressional action in 1972 on the ABM Treaty was never really in doubt. Most of the concern and criticism expressed was over the interim agreement, not the treaty. In fact, the ABM Treaty drew only scattered objections. Among the few who testified against it was Conservative-Republican Senator James L. Buckley of New York, one of only two senators who also later voted "nay" when the treaty came up for a vote. As Buckley saw it, the entire concept of banning or imposing restraints on defensive systems was inherently flawed and unacceptable as a basis for national policy. "I have strong misgivings," Buckley said,

as to both the prudence and the ultimate morality of denying ourselves for all time . . . the right to protect our civilian populations from nuclear devastation. I am not suggesting that we have the technical means to do so at the present time, but I challenge the morality of precluding the possibility of developing at some future date new approaches to ballistic missile defenses which offer protection to substantial numbers of people.⁷⁶

(U) Despite Buckley's unease, the vast majority of the Senate looked on the ABM Treaty in a far more favorable light. Indeed, many regarded it as a solid contribution to the country's security. As a test of congressional sentiment, moreover, the final Senate vote on the ABM Treaty (88-2) was a clear indication that support for BMD had ebbed considerably. Not all who voted for the treaty may have believed, as many ABM critics did, that missile defenses were wasteful and destabilizing, but given the political climate at the time, even supporters of ABM declined to take issue. As a result, the ABM Treaty became enshrined as one of the crowning achievements of the

⁷⁶ U.S., Congress, Senate, Committee on Foreign Relations, Hearings: Strategic Arms Limitation Agreements, 92:2 (Washington, D.C.: G.P.O., 1972), 257.

U.S.-Soviet arms control process, making any departure from it, either in fact or in theory, a most risky proposition politically. It was against this historic background of ambivalent and often ambiguous congressional action on ballistic missile defense programs that the Strategic Defense Initiative of the 1980s went forward.

CHAPTER II

LAUNCHING SDI (1972-1983)

(U) With the ABM Treaty debate behind it, Congress seemed satisfied that the ballistic missile defense issue would remain dormant for the indefinite future. This did not mean that BMD was finally resolved once and for all, but rather that, as a political issue, it had moved to the "back burner." For nearly a decade missile defense was a matter of low priority--and treated as such by Congress.

(U) Then, in the late 1970s, during Jimmy Carter's presidency, the picture began to change. Despite on-going arms control negotiations and the proffered SALT II Treaty, the steady buildup of Soviet offensive strategic weaponry continued unabated. By the end of the decade that buildup had reached the point where U.S. land-based ICBMs--lacking the numbers and throw-weight of their Soviet counterparts--appeared to some strategic analysts to be increasingly vulnerable to a disarming Soviet first strike. At the same time, the era of detente was nearing an end owing to increased friction between Washington and Moscow. In the wake of the Soviet invasion of Afghanistan in December 1979, all signs pointed toward a tougher American policy toward the Soviet Union, including a stepped up effort by the Carter administration to strengthen the U.S. defense posture.

(U) It fell to the Reagan administration to fulfill not only Carter's but also its own even more ambitious promises to restore U.S. military power. Central to Reagan's defense program was a substantial strengthening of U.S. strategic forces. Although the initial emphasis was on offensive capabilities, it soon became clear that Reagan intended to exploit recent scientific breakthroughs in defensive systems as well, breakthroughs that some argued would revolutionize thinking about strategic warfare just as the advent of atomic weapons had done nearly four decades earlier. Thus even before Reagan's momentous speech of March 23, 1983, the stage was set for a new debate on strategic defenses.

Progress in Ballistic Missile Defense

(U) While the 1972 ABM Treaty imposed significant curbs on U.S. and Soviet ballistic missile defense programs, it did not ban BMD research and development in either country. On the contrary, it left both sides free to pursue whatever R&D they cared to undertake so long as it conformed to the limitations and strictures spelled out in the treaty. Some of these prohibitions were quite explicit, like the number of permitted interceptors and deployment areas; but others, such as the range and extent of research and testing, were subject to unilateral interpretation.

(U) Because of these gray areas in the treaty, two radically different interpretations eventually emerged. The United States adhered initially to what would later be termed the "narrow" or traditional interpretation of the ABM Treaty. Based on administration testimony during the ABM Treaty hearings, many on Capitol Hill concluded that the areas of activity allowed under the Treaty were exceedingly limited and that the Treaty itself should be interpreted and applied accordingly. Many legislators were also persuaded by arguments presented during the hearings that, with strategic defenses now on the verge of being eliminated, the basis of East-West strategic stability would rest henceforth on the two sides' mutual vulnerability, i.e., the doctrine of mutual assured destruction. The overall result of this line of reasoning was a general waning of interest in and support for ballistic missile defense, not only in the Executive Branch, but on Capitol Hill as well, leading Congress to mandate the closing in the mid-1970s of the only American ABM installation, and to reduce significantly the size and tempo of the American BMD research effort for the remainder of the decade.

(U) The Soviets, in contrast, appeared to impose no such restraints upon themselves. On the contrary, Soviet policy, as set forth in 1972 by Marshal Andrei Grechko, the minister of defense, held that the ABM Treaty placed no limitations whatsoever "on the conduct of research and experimental works directed at the solution of the problem of the defense of the country against rocket nuclear strikes."¹ Accordingly, during the 1970s and on into the 1980s, the Soviets continued

¹ Quoted in Pravda, Sept. 30, 1972, and cited in David S. Yost, "Strategic Defenses in Soviet Doctrine and Force Posture," in Fred S. Hoffman, Albert Wohlstetter, and David S. Yost (eds.), Swords and Shields: NATO, the USSR, and New Choices for Long-Range Offense and

to forge ahead with refinements in their existing ABM systems and with research into more advanced technologies. In the United States, no comparably broad interpretation giving rise to such efforts would receive credence until the advent of SDI.

The Soviet BMD Program. (U) When the ABM treaty was signed in 1972, the consensus among participants in the U.S. missile defense program and among knowledgeable observers was that the United States held the technological lead in BMD. But with diligent and persistent work the Soviets were able to close much of the gap in conventional BMDs by the end of the decade and press on into other areas.²

(U) By all accounts, the Soviet missile defense program, as it evolved in the 1970s and early 1980s, was substantial and wide-ranging. In addition to maintaining their one allowed active terminal defense system near Moscow, the Soviets kept up a level of activity at their Sary Shagan test center much the same as before the treaty was signed.³ This included the combined development of a new high-acceleration interceptor missile, the SH-08 "Gazelle," similar to the U.S. Sprint, which the Soviets based in silos that Western intelligence suspected of being equipped with an underground rapid reload system; and a more sophisticated transportable phased-array radar. At the same time, the Soviets continued to invest heavily in civil defense measures and in improving their air defenses against penetrating U.S. bombers. Projecting ahead, they also kept up a vigorous R&D program, dating from the mid-1960s, in chemical lasers, and maintained a sporadic testing program to develop an antisatellite (ASAT) capability.

Defense (Lexington, Mass.: Lexington Books, 1987), 133.

² The assessment of the Soviet BMD program presented here draws principally on the following: Bruce Parrott, The Soviet Union and Ballistic Missile Defense (Boulder, Colo.: Westview Press, 1987); Sayre Stevens, "The Soviet BMD Program," in Ashton B. Carter and David N. Schwartz (eds.), Ballistic Missile Defense (Washington, D.C.: Brookings, 1984), 182-220; U.S. Dept. of Defense, Soviet Military Power (2d. ed.; Washington, D.C.: G.P.O., 1983); and Yost, "Strategic Defenses in Soviet Doctrine and Force Posture," 123-157.

³ The 1972 ABM Treaty allowed two deployment areas with 100 interceptors and launchers in each. However, neither the United States nor the Soviet Union exercised the option of building a second deployment area. In 1974 they signed a protocol reducing the number of deployment areas to one in each country. For the text of the protocol, see ACDA, Arms Control and Disarmament Agreements: Texts and Histories, 161-163.

(U) By the early 1980s Western intelligence also had confirmed that the Soviets were working on an antitactical ballistic missile (ATBM), the SA-X-12, for use against short-range ballistic missiles. Though not prohibited by the ABM Treaty, ATBMs did have some strategic potential, particularly against submarine-launched ballistic missiles, which had a slower and lower angle reentry profile than ICBMs. In sum, as one U.S. strategic analyst put it, the Soviet program "had a flavor of steady, unfrenzied progress toward defined development goals."⁴

The U.S. Missile Defense Program. (U) The U.S. program proceeded at a more leisurely pace, with a somewhat different focus. Once the ABM Treaty was on the books, Congress all but shut down the U.S. BMD program, cutting back sharply on R&D funding and mandating the closure of the nation's only active ABM facility in 1976. In these circumstances, those in charge of what remained of the U.S. BMD effort reoriented their thinking toward finding simpler, cheaper solutions based initially on conventional BMD techniques, i.e., the technologies defined and limited in the ABM Treaty. As described by the deputy director of the Army's ballistic missile defense program, "The task was to apply emerging technologies and system design features that would lead to an economically feasible solution to defense against large numbers of reentry vehicles."⁵ The main components were still those used in the Safeguard program, i.e., ground-based interceptor missiles with phased-array radars for tracking and targeting, now adapted to what the Army termed "site defense," a system designed primarily for the protection of Minuteman missile silos. The aim was to develop an "on the shelf" system that would be available for application should the need arise. But because of opposition in Congress, the Army was never able to conduct a prototype demonstration.⁶

⁴ Stevens, "The Soviet BMD Program," 211.

⁵ William A. Davis, Jr., "Current Technical Status of U.S. BMD Programs," in U.S. Arms Control Objectives and the Implications for Ballistic Missile Defense, Proceedings of a Symposium held at the Center for Science and International Affairs, Harvard University, Nov. 1-2, 1979, p. 29.

⁶ *Ibid*, 31. Also see the testimony by Maj. Gen. Grayson D. Tate, USA, Program Manager, BMD Program, Mar. 23, 1983, in U.S. Congress, Senate, Committee on Armed Services, Hearings: DoD Authorization for Appropriations for FY 1984, Pt. 5, Strategic and Theater Nuclear Forces, 98:1 (Washington, D.C.: G.P.O., 1983), 2643-2645.

(U) By the late 1970s, the deteriorating U.S. retaliatory capability in the face of a growing Soviet ICBM threat to American land-based missiles caused the Defense Department to contemplate a series of offsetting measures. Included was the possibility of a revitalized BMD program. Given the reluctance of Congress to commit further substantial resources toward ballistic missile defenses, even those permitted under the ABM Treaty, BMD research began turning to promising new alternative approaches that involved what were variously termed "exotic" or "futuristic" systems. In June 1980, for example, a team of scientists at the Los Alamos Scientific Laboratory (LASL) in New Mexico presented a conceptual design for an exoatmospheric BMD system relying on space-based long-wave infrared passive detectors to sort out targets, and multiple nonnuclear kinetic kill vehicles as interceptors. Although the LASL scientists acknowledged that the technological base for such a system was still far from complete, they insisted nonetheless that a demonstration of the feasibility of exoatmospheric interception could take place "within a few years." Looking ahead to the 1990s and beyond, they anticipated additional breakthroughs that would make possible boost-phase intercept with directed-energy weapons, either lasers or particle beams.⁷

(U) At Los Alamos' rival, the Lawrence Livermore National Laboratory near San Francisco, a similar ABM project was gathering momentum at about the same time. The coordinator, Dr. Lowell Wood, was a protege of Dr. Edward Teller, former director of Lawrence Livermore and hailed by many as the "father" of the U.S. H-bomb. Known as "Excalibur," the project's purpose was to explore the practicability of a theory initially posited by Peter Hagelstein, an MIT-trained electrical engineer, who envisioned a compact laser pumped by X-rays from a small nuclear detonation. After several failures, the concept was successfully tested at the Nevada underground nuclear test site late in 1980.⁸

(U) Encouraged by the results, Teller launched a vigorous lobbying campaign in Washington to gain additional funding and support for X-ray laser research. With the advent of the Reagan

⁷ Office of Planning and Analysis, Los Alamos Scientific Laboratory, "Ballistic Missile Defense: A Quick-Look Assessment" (LA-UR-80-1578, June 1980).

⁸ William Broad, Star Warriors: The Young Scientists Who Are Inventing the Weaponry of Space (New York: Simon and Schuster, 1985), 118-119; Clarence A. Robinson, Jr., "Advance Made on High Energy Laser," Aviation Week and Space Technology, Feb. 23, 1981: 25-27.

administration in 1981, Teller, who knew Reagan personally, was all but assured a sympathetic audience. While governor of California in 1967, Reagan had attended a special Lawrence Livermore briefing arranged by Teller on the progress being made there in strategic defenses, and over the years since they had stayed in touch on such matters. In the events leading up to Reagan's SDI speech, it seems clear that Teller's views were among those the President found most persuasive.⁹

(U) Excalibur, as Teller saw it, was more than simply another scientific experiment. Indeed, at the core of the program, he believed, was the chance for a radical revision of U.S. strategic doctrine. "A single x-ray laser . . . the size of an executive desk," he argued, ". . . could potentially shoot down the entire Soviet land-based missile force."¹⁰ With such enormous potential, in Teller's estimation, the X-ray laser and similar new technologies, if fully exploited, offered the opportunity to liberate humanity, once and for all, from the dismal threat of nuclear war. Instead of a strategy of deterrence resting on the threat of mutual assured destruction, or MAD, Teller foresaw the coming of a new era of mutual assured survival built around defensive rather than offensive weaponry. "The policy of the West," he argued,

is to preserve peace. We tried to do it by deterrence--because on the other side, in the East, there is an expansionist, imperialist power. Peace was to be preserved by the obvious means of deterrence: the menace of retaliation. . . . I don't think any of us liked it from the very beginning. It has been not quite morally acceptable; not to me, not (I believe) to any reasonable person. There seemed to be no alternative. Now an alternative has emerged. We find in our developing technology more and more possibilities of real defence. Not with the idea and, I would certainly say, not with the assurance of complete protection, but with the idea that defense can make the result of aggression doubtful. . . .¹¹

⁹ Sanford Lakoff and Herbert York, A Shield in Space? (Berkeley, Calif.: University of California Press, 1989), 11-14. Also see Broad, Star Warriors, 122; and Gregg Herken, "The Earthly Origins of Star Wars," Bulletin of the Atomic Scientists, vol. 43, no. 8 (Oct. 1987), 20-22.

¹⁰ Ltr, Teller to Paul H. Nitze, Dec. 28, 1984, in Bulletin of the Atomic Scientists, 44 (Nov. 1988): 5.

¹¹ Teller quoted in Michael Charlton, From Deterrence to Defense (Cambridge, Mass.: Harvard University Press, 1987), 95-96.

(U) Because of Teller's prestige and influence, especially among conservatives, his views carried considerable weight and helped generate interest in Congress in accelerating work on laser devices. But by and large, Teller's support of strategic defenses was more general than specific: what he had in mind was still years in the future, a point he evidently made repeatedly in his meetings with Reagan. Thus, despite his lobbying for stepped-up research on the X-ray laser, Teller remained noncommittal on the issue of if or when it could be deployed, a shrewd decision on Teller's part in view of later criticism that he and Wood had grossly exaggerated the X-ray laser's potential.¹²

High Frontier. (U) While Teller took no position on the actual deployment of new defensive weaponry, others were convinced that certain advanced technologies had already reached the point where engineering development and deployment could begin almost immediately. The chief sponsor of one such plan was Lt. Gen. Daniel O. Graham, USA (Ret.), a former director of the Defense Intelligence Agency (DIA) and an adviser on defense matters to Reagan's 1976 and 1980 presidential campaigns. In 1981, Graham started a lobbying organization called High Frontier, which quickly established close ties with the Heritage Foundation, a conservative think-tank. The founding axiom behind High Frontier was that with a technological "end run," concentrated on the deployment of defensive systems in outer space, the United States could regain the strategic superiority it had enjoyed over the Soviets in the 1950s and 1960s. It was a notion that held special appeal, not only for many in the military, but also for those conservatives who thought the United States should be doing more to bolster its defense posture in the face of a growing Soviet strategic threat. Among High Frontier's supporters and contributors were Joseph Coors, the Colorado brewer; California businessman Jaquelin Hume; investment banker William A. Wilson; and industrialist Karl Bendetson,

¹² Janne E. Nolan, Guardians of the Arsenal: The Politics of Nuclear Strategy (New York: BasicBooks, 1989), 166-168.

who had once been an Assistant Secretary of the Army in the Truman administration, all well-known conservatives and members of Reagan's informal "kitchen cabinet."¹³

(U) The concept initially advanced by Graham and his High Frontier associates was one developed by SRI International, a California-based commercial research company, which submitted an unsolicited design proposal to the Defense Department around the end of 1981. The key feature of the SRI design was a system of layered defenses designed to destroy incoming ballistic missiles using a combination of known and not-so-well-known technologies. In its initial phase the system would comprise a ground-based terminal point defense using missile interceptors, and a first generation space-borne kinetic-energy kill system under study by Boeing and the L.T.V. corporations, an outgrowth of Project BAMBI in the 1960s (see chapter I). In the future, High Frontier also envisioned the addition of a follow-on second generation space defense system employing advanced laser technology and a "high performance space plane" (HPSP) for such missions as surveillance, maintenance, and inspection of suspect space objects. Claiming that "off-the-shelf" technology could do many of these jobs, the SRI proposal boasted low costs and the feasibility of near-term development-deployment.¹⁴ However, close inspection by a joint Army-Air Force evaluation committee revealed a number of critical flaws. The major weaknesses, in the committee's estimation, were an overly optimistic assessment of the potential of existing technologies; a deployment timetable that would be exceedingly hard to meet; and cost estimates that were utterly unrealistic, using prices that were roughly one-tenth of DoD schedules.¹⁵ An added complication was that the principal author of the SRI design, a close associate of Graham's named Fred W. "Bud"

¹³ R. Jeffrey Smith, "Reagan Plans New ABM Effort," Science, vol. 220, no. 4593 (8 Apr. 1983): 170.

¹⁴ For a synopsis of the High Frontier program, see Daniel O. Graham, High Frontier: A New National Strategy (Washington, D.C.: Heritage Foundation, 1982).

¹⁵ Ltr, Gen. Charles A. Gabriel, CoS/USAF, to BG Robert Richardson, USAF (Ret), High Frontier, July 26, 1982, with enclosure "Assessment of High Frontier Study: a Summary,"; Memo for the record by Col. Charles J. Steiner, USAF, Asst DCS for New Concepts and Initiatives, DCS/Plans and Programs, and Col. Harry S. Ennis, USA, Chief, Technology Group, BMD Program Office, Mar. 31, 1982, sub: Evaluation of SRI International's Global Ballistic Missile Defense Unsolicited Proposal, all in SDIO External Affairs, Congressional Correspondence file, J. Bennett Johnston folder.

Redding, Jr., had a dubious reputation among DoD analysts. According to one, Redding's thinking was "shallow and naive."¹⁶ Taking these various findings into account, Deputy Secretary of Defense Frank C. Carlucci advised Graham that while High Frontier's proposals had potential, they would need further extensive study.¹⁷

(U) Subsequently, in late September 1982, a subcommittee of the Senate Foreign Relations Committee initiated hearings into the problems of arms control and the militarization of outer space. Although the subcommittee chairman, Republican Larry Pressler of South Dakota, was chiefly interested in what he saw as an emerging U.S.-Soviet competition over antisatellite weapons (ASATs), the subcommittee's investigation also touched on broader issues, including Graham's High Frontier studies. Responding to the panel's questions, Richard D. DeLauer, Under Secretary of Defense for Research and Engineering, dismissed High Frontier as largely a mirage. "Two weaknesses, as far as I am concerned," he said, "are the time it would take and the amount of money it would take. I think they are grossly underestimated." Likewise, he was exceedingly skeptical of some of High Frontier's supporting technologies, especially in the area of directed energy weapons. "Lasers are a military possibility," he acknowledged, "but major uncertainties still exist." In short, DeLauer concluded, although the Department of Defense was interested in exploring space-based and other exotic defensive technologies, it had no plans for and could not foresee such systems becoming a reality anytime soon.¹⁸

¹⁶ Memo, Herbert A. Reynolds for Gen. Stilwell, Sep. 28, 1981, sub: BMD Concept Submitted by Bud Redding, SRI, *ibid*.

¹⁷ Ltr, Carlucci to Graham, Sep. 2, 1982, *ibid*.

¹⁸ DeLauer testimony, Sept. 20, 1982, U.S. Congress, Senate, Committee on Foreign Relations, Subcommittee on Arms Control, Oceans, International Operations and Environment, Hearings: Arms Control and the Militarization of Space, 97:2 (Washington, D.C.: G.P.O., 1982), 24-25, 37.

The Reagan Administration
and Missile Defense

(U) As DeLauer's remarks suggested, senior officials in the Defense Department, while supportive of research into advanced BMD systems, accorded such programs low priority until the President's speech of March 23, 1983. Not only were the technologies in most instances untried or untested, but also they involved exceedingly expensive research that would place yet another burden on an already strained defense budget. In fulfilling its pledge to repair what it saw as a decade of neglect to the nation's defenses, the Reagan administration, when it came into office in 1981, moved first to strengthen offensive strategic nuclear retaliatory capabilities and general purpose forces. In these circumstances, the Pentagon's early budgets left little money or room for a stepped up effort in the area of ballistic missile defense.¹⁹

(U) Nonetheless, as a matter of policy, if nothing else, Reagan announced early in his presidency that it was his intention to "develop technologies for space-based missile defense" and to expand work in related areas like civil defense.²⁰ On July 4, 1982, the White House reiterated its commitment in a fact sheet on space policy that mentioned "space defense" as an integral part of national security.²¹ Not only did this suggest a more active BMD program, but also it implied that Reagan, unlike his predecessors from Eisenhower on, would not observe a "freedom of space" policy. Yet in sorting out the details, senior Reagan administration officials like DeLauer; George A. Keyworth, the President's science advisor; and Dr. Robert S. Cooper, director of the Defense Advanced Research Projects Agency (DARPA), exhibited a notable lack of enthusiasm for setting specific objectives, especially in such areas as laser development. In assessing the prospects, they

¹⁹ For an overview of the budget situation, see Dennis S. Ippolito, "Defense Budgets and Spending Control: The Reagan Era and Beyond," in William P. Snyder and James Brown (eds.), Defense Policy in the Reagan Administration (Washington, D.C.: National Defense University Press, 1988), 169-202.

²⁰ New York Times, Oct. 3, 1981, p. 12.

²¹ Fact Sheet Outlining United States Space Policy, July 4, 1982, Public Papers of the Presidents of the United States: Ronald Reagan, 1982 (Washington, D.C.: G.P.O., 1983), 897.

tended to cling to the advice of a 1981 Defense Science Board study that "it is too soon to attempt to accelerate space-based laser development toward integrated space demonstration for any missions" because of technical uncertainties surrounding the development of high energy lasers and their associated optical systems.²² That a more vigorous and purposeful effort to overcome these difficulties might encounter political problems because of the 1972 ABM Treaty seems to have been a factor in their thinking as well.²³

(FOUO) This mindset, as some proponents of ballistic missile defense saw it, was at the root of the administration's initial go-slow attitude toward strategic defense. Prior to March 1983, the most advanced government-sponsored research program with possible BMD applications was the so-called DARPA "Triad," consisting of a highly experimental chemical laser project called ALPHA, and two companion projects--LODE (for "Large Optics Demonstration Experiment") and TALON GOLD, an advanced target acquisition and tracking system. Accordingly to Air Force Maj. Gen. Robert R. Rankin, Jr., one of the managers of the program, the operating assumption at the time was that while the Triad technologies had potential for antisatellite warfare and antiaircraft defense, their application for BMD purposes "was pretty much still beyond our grasp."²⁴ Nonetheless, early in 1982 the General Accounting Office (GAO) sent Congress a classified report recommending acceleration of research on chemical lasers and development of more specific plans and the creation of an organization for their use in space against attacking ballistic missiles.²⁵ In June 1982, as a gesture in this direction, Secretary of Defense Caspar W. Weinberger approved and sent to Congress plans for a joint Army-Air Force Space-Based Laser (SBL) program that was supposed to explore

²² U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1984, 98:1, Part 8 (Washington, D.C.: G.P.O., 1983), 485.

²³ See Dr. Robert S. Cooper's testimony, Mar. 16, 1982, U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1983, Part 7, Strategic and Theater Nuclear Forces, 97:2 (Washington, D.C.: G.P.O., 1982), 4873-4874.

²⁴ (FOUO) Interview with Maj. Gen. Robert R. Rankine, Jr. (USAF), by Lt. Col. Donald Baucom (SDIO), n.d., SDIO Historian's files.

²⁵ Clarence A. Robinson, Jr., "GAO Pushing Accelerated Laser Program," Aviation Week & Space Technology, Apr. 12, 1982: 16-19.

the technical feasibility of space-based laser systems for strategic defense missions, with the goal of making an informed decision by FY 1987 on whether to proceed with an on-orbit demonstration.²⁶

(U) On Capitol Hill, a dispute between the Republican-controlled Senate Armed Services Committee and its Democratic-controlled counterpart in the House raised serious questions about the future of any space-based laser program. While the Senators supported the existing DARPA program, the House panel, at the urging of one of its professional staff members, Anthony Battista, wanted to terminate research on chemical lasers and redirect resources into research on short-wavelength laser systems.²⁷ Testifying for the administration, Dr. Robert S. Cooper acknowledged that "fundamental physical principles" favored shorter wavelength lasers. Nonetheless, he saw no need to reorder current research priorities, and he rejected a suggestion by Sen. John Warner (R., Va.) that anything above the current level of funding (about \$150 million per year) would stimulate faster progress in laser technology.²⁸ Eventually, the House and Senate panels patched over their differences in conference with a compromise that, for the time being, gave research on both laser systems roughly equal priority.²⁹ In the end Congress proved unreceptive to the administration's proposed space laser program and deleted most of the requested funds from the Pentagon's FY 1983 budget on the grounds that the program seemed too diffuse and hastily conceived. As the House Appropriations Committee saw the situation: "There appears to be a need to consolidate the directed energy weapons programs under one organization, giving it program and funding control over all the separate efforts in this area."³⁰

²⁶ HAC, DoD Appropriations for 1984, 444-445; SCAS, DoD Authorization for FY 1984, Pt. 5, 2648.

²⁷ "House, Senate Units Seek Laser Effort Agreement," Aviation Week & Space Technology, June 14, 1982: 26-27.

²⁸ Cooper testimony, Mar. 16, 1982, SCAS, DoD Authorization for Appropriations for FY 1983, 4850, 4874-4876.

²⁹ H. Rpt. No. 97-749, pp. 125-126.

³⁰ H. Rpt. No. 97-943, p. 176.

Wallop for the Defense

(U) Among congressional critics of the administration's directed energy and BMD research programs, none was more outspoken and relentless than a prominent member of President Reagan's own political party, Sen. Malcolm Wallop of Wyoming, who thought that an accelerated effort was both feasible and essential. Wallop's interest in ballistic missile defense dated from the late 1970s when, like others members of Congress, especially conservatives like himself, he became concerned over the Soviet buildup in offensive strategic missiles that threatened to tilt the balance of strategic power in favor of the Soviet Union. A member of the Senate Select Committee on Intelligence, Wallop had access to a broad range of information, not only on Soviet military activities but also on U.S. space-based satellite reconnaissance capabilities, which he found to have possible ballistic missile defense applications.³¹

(U) According to his legislative aide, Angelo Codevilla, Wallop sought out additional technical information from industry and government specialists, particularly those associated with the Army's Ballistic Missile Defense Advanced Technology Center in Huntsville, Alabama, and a group working under Maxwell Hunter, an engineer with Lockheed's Missiles and Space Division in California.³² In 1979 Wallop summarized much of what he had learned in an article in Strategic Review in which he highlighted new and impending breakthroughs in directed energy weapons as offering a viable counter to the Soviet ICBM threat. Along with Teller and others of a like mind, Wallop was especially critical of what he termed the "MAD hangover" in U.S. strategic doctrine that placed deterrence above defense. "It is high time," he argued, "that we lay the phantom of MAD to rest and that we turn our attention to the realistic task of affording maximal protection of our society in the event of conflict." Combining improvements in conventional missile defenses with the advent and increasing sophistication of directed energy weapons, lasers especially, Wallop thought he saw the elements of a workable system with near-term, substantial benefits. The strictures of the

³¹ On Wallop's education in this regard, see Angelo Codevilla, While Others Build (New York: Free Press, 1988), 58-66.

³² *Ibid*, 63-66.

ABM Treaty he dismissed as insignificant if not irrelevant. "The SALT I Treaty of 1972 [sic], which banned 'conventional' ABMs," he believed, "specifically mentioned ABM systems 'based on other physical principles,' committing the United States and the Soviet Union only to discussing such systems if and when they 'are created.'" Using this loose (some said questionable) reading of the ABM Treaty as his point of departure, he saw a clear path ahead: "If the United States were to take the decision to provide itself with active defense, the first space-based battle stations . . . could be in orbit by the mid-1980s."³³

(U) Despite similarities between Wallop's strategic defense scheme and Daniel Graham's High Frontier, there were also significant differences. While High Frontier promoted "kinetic kill" systems and manned space vehicles, Wallop was more interested in furthering remotely controlled chemical laser technology, which he thought had more useful and immediate weapons applications.³⁴ Lacking membership on either the Armed Services or Appropriations Committees, Wallop, in seeking to bolster his cause, had perforce to operate from the Senate floor, where he had the support of a small but likewise dedicated band of laser advocates, including Senators Pete V. Domenici (R., N.M.), Howell Heflin (D., Ala.), and Harrison Schmitt (R., N.M.), a former NASA astronaut.³⁵ In the summer of 1980 Wallop launched the first of what was to become a yearly effort to expand chemical laser research by trying to attach an amendment to the FY 1981 defense authorization bill. Although the effort fell short by a vote of 39 to 52,³⁶ Wallop was encouraged to try again the next year. This time, with a Republican (and more conservative) Senate, he secured adoption of an amendment to the FY 1982 defense authorization adding \$50 million for laser R&D and a space laser program office that was to be created within the Air Force.³⁷ However, the House version of the

³³ Malcolm Wallop, "Opportunities and Imperatives of Ballistic Missile Defense," Strategic Review 7 (Fall 1979), 13-21.

³⁴ Author's interview with Wallop, June 6, 1990.

³⁵ Congressional Quarterly Almanac, 1981, p. 216.

³⁶ Congressional Record, July 1, 1980, pp. 18114-18120.

³⁷ *Ibid*, May 13, 1981, pp. 9612-9617.

bill contained no such provisions and during the House-Senate conference all but \$5 million of the added laser research funds were dropped.³⁸

(U) In 1982 Wallop pursued a somewhat different strategy. Instead of proposing budget increases, he offered an authorization amendment that directed the Secretary of Defense, without stating how or where to find the money, to build a laser ballistic missile defense system as quickly as possible. As a test of sentiment, requiring no real commitment on the part of the Senate, the measure was a success. It passed handily by voice vote.³⁹ But like the year before, the conference committee, citing "strong objections from the House conferees," decided to delete it.⁴⁰

(U) Increasingly, as he suffered one setback after another, Wallop came to blame not only skeptics and liberal opponents of missile defenses but also congressional leaders in his own party who seemed too ready to defer to the administration's lead. In the wake of the 1982 controversy over short-wave versus chemical lasers, Wallop became convinced that, despite Reagan's stated desires, the President's subordinates in the White House and the Pentagon had no intention of bringing space-based defenses to early fruition. "[B]oth I and the newfound advocates of short-wave-length lasers know perfectly well," he charged, "that these devices are not ready to be made into weapons. I'm afraid this was another instance of an old shabby practice: defeat a weapon we can make with one we cannot."⁴¹

(U) What Wallop really wanted was a firm, irrevocable commitment from the Reagan administration to pursue and deploy space-based defenses--not a long-range research effort, but a working weapons system. Hence his later frustration over--and frequent criticism of--the orientation of the President's Strategic Defense Initiative, which, in its early stages, emphasized research over development of actual weapons. In September 1982, at a luncheon meeting with

³⁸ H. Rpt. No. 97-311, p. 93.

³⁹ Congressional Record, May 13, 1982, p. S5093.

⁴⁰ H. Rpt. No. 97-749, p. 126.

⁴¹ Ltr, Wallop to Sen. John Tower, ca. 1983, quoted in Thomas Lydon, Space-Based Defense Systems Market Study and Forecast (Greenwich, Conn.: Defense Marketing Services, 1984), 73.

Secretary of Defense Weinberger, Under Secretary DeLauer, and others from the Defense Department, Wallop reiterated his support of the chemical laser program and urged Weinberger to initiate measures leading to a space-based feasibility demonstration. According to Codevilla, who also attended the meeting, Weinberger was noncommittal, DeLauer typically skeptical.⁴² But a week later Aviation Week & Space Technology reported that the outcome of the meeting had been generally favorable, that Weinberger was sympathetic to Wallop's concerns, and that efforts would be made to expedite laser technology.⁴³ None of these assurances was, of course, inconsistent with administration policy at the time, though they did suggest that that policy might be changing into one of more active pursuit. Even so, were a more ambitious program to result, as Wallop, Graham, Teller, and others wanted, it would take more than a shift of thinking within the administration. Congress also would have to be involved and committed, and by the end of 1982 the signs from Capitol Hill, while increasingly favorable, were still far from clear. What remained to be seen was whether a bipartisan consensus in support of stepped up ballistic missile defense research could be developed and sustained.

March 23, 1983.

and Its Immediate Aftermath

(U) In terms of purely bureaucratic and organizational concerns, it seems clear that the creation of SDI or something like it was, as the 1980s progressed, only a matter of time because of the proliferation in the number and scope of high technology programs with BMD potential and the increasing pressure of Congress on the administration to adopt more streamlined management practices. As mentioned earlier, the House Appropriations Committee, in acting on the FY 1983 defense budget, roundly criticized the Reagan administration for its failure to provide closer and more effective program controls and supervision. Speaking not only for itself but probably also for

⁴² Aviation Week & Space Technology, Sep. 20, 1982: 15; Codevilla, While Others Build, 87.

⁴³ Clarence A. Robinson, Jr., "Defense Dept. Backs Space-Based Missile Defense," Aviation Week & Space Technology, Sep. 27, 1982: 14-16.

many others in Congress, the committee concluded that "the directed energy weapons program suffers from lack of administrative oversight and responsibility by a central authority." Despite the insistence of DoD officials that the oversight being provided was adequate, the mood in Congress increasingly favored more centralized administrative practices.⁴⁴

(U) But at the same time, even though Congress may have agreed on the need for better, closer management, members of the House and Senate were still far from united on what the directed energy program should do or try to accomplish. Indeed, on defense matters in general, Congress was more divided than it had been for years, riven with controversies like those over the deployment of the MX ("Peacekeeper") missile, antisatellite weapons, the nuclear freeze issue, and the administration's ambitious revival of civil defense measures. While the splits tended to originate along party lines, ideological considerations entered in as well, with liberal Democrats and some moderate Republicans increasingly restive under the administration's unprecedentedly large defense spending, growing budget deficits, and lack of progress in arms control. It should also be remembered that what became famous as Reagan's SDI speech was actually a televised address devoted foremostly to promoting public support of increases in his FY 1984 defense budget, which had become stalled in Congress. The proposal of what became SDI came at the end of the speech, a strong conclusion to be sure, but almost as an afterthought. As a practical matter, Reagan's decision to highlight the need for strategic defenses and to call for a bold new (and undoubtedly expensive) initiative to "counter the awesome Soviet missile threat" and to render these weapons "impotent and obsolete," came at what appears a curious, if not politically awkward, moment.

(U) In the weeks and days leading up to his speech of March 23, 1983, Reagan gave little hint of what was in the offing.⁴⁵ In fact, few were aware that such a dramatic announcement was pending, and there was a report afterward that "several White House and Pentagon aides" had tried

⁴⁴ H. Rpt. No. 97-943, p. 176.

⁴⁵ The best account of the background and events leading up to Reagan's speech is Donald R. Baucom, "Hail to the Chiefs: The Untold History of Reagan's SDI Decision," Policy Review 53 (Summer 1990): 66-73. Also see Nolan, Guardians of the Arsenal, 6-17 and *passim*.

to dissuade Reagan making it.⁴⁶ Reagan, trusting his instincts, went ahead anyway. According to White House science advisor George Keyworth: "This was not a speech that came up; it was a top-down speech . . . a speech that came from the President's heart."⁴⁷ Although Reagan had held prior consultations with the Joint Chiefs, Teller, and a few others, he made no attempt to approach members of Congress, not even the legislative leaders of his own party, lest there be leaks to the press. As a result, he took Congress, the nation, and even many of his senior advisors by surprise, including members of his administration who had been telling Congress and the public, in effect, that what the President had in mind was at best a distant vision.⁴⁸ In the event, Reagan's speech laid down perhaps the most formidable scientific and technological challenge in history with the least prior thought or consultation. In Colin S. Gray's estimation, it was "one of those very rare occasions when general policy guidance is way ahead of strategy and of technology."⁴⁹

(U) The immediate impact of the President's speech was to cast the related issues of space defenses and directed energy weapons in an altogether new light. Overnight, what had previously been scattered, limited research measures reemerged as extraordinarily promising and ambitious technologies, the pathway to future military programs, with potentially enormous strategic and fiscal implications. The avowed intent was nothing less than a wholly new strategic posture that would rid the world of having to live under mutual assured destruction and the constant threat of nuclear annihilation. To many listeners this suggested that what Reagan had in mind was a leak-proof, impenetrable shield--costly, risky, and perhaps unattainable. Unfortunately for SDI, as Wallop later

⁴⁶ New York Times, Mar. 25, 1983: 1.

⁴⁷ Quoted in Smith, "Reagan Plans New ABM Effort," 170.

⁴⁸ In fact, on the very day of the President's speech, administration spokesmen continued to insist that the prospects of a defensive system along the lines the President would propose were not overly encouraging. Appearing before a Senate Armed Services subcommittee on March 23, 1983, Maj. Gen. Grayson D. Tate, USA, manager of the Army's BMD Program, stated that the technology for space-based defenses was "still somewhat in its infancy." Maj. Gen. Donald L. Lamberson, USAF, Assistant for Directed Energy Weapons in the Office of the Under Secretary of Defense for Research and Engineering, offered a similar assessment, characterizing research as being "very much in the early stages of technology demonstration." SCAS, Dept. of Defense Authorization for FY 1984, Pt. 5, pp. 2645, 2647.

⁴⁹ Colin S. Gray, American Military Space Policy (Cambridge, Mass.: Abt Books, 1982 [sic]), 2.

put it, this suggestion gave the program "the seeds of its own ridicule." Had Reagan settled for something less grandiose and more realistic--a limited deployment, for example, on which future strategic defenses could be built--he might avoided much subsequent criticism and mockery of his idea.⁵⁰

(U) While the President's announcement caught most people unawares, it was not long before public and congressional opinion began taking sides in the matter. The night he gave the speech Reagan invited a number of prominent scientists to dinner at the White House to gauge their reactions. Responses varied. Edward Teller waxed enthusiastic about the President's initiative and later praised it as providing "the needed basis for a stable, lasting peace."⁵¹ But Dr. Victor Weisskopf of MIT took issue, declaring the President's plan "extremely dangerous and destabilizing." Professor Wolfgang Panofsky of Stanford, a longtime foe of ballistic missile defenses and a leading opponent of ABM in 1969, declined Reagan's dinner invitation, but told the press shortly after that he found the whole idea of space-based defenses "somewhat spiritually troubling." Jerome Wiesner, former White House science advisor to President Kennedy and a long-time opponent of missile defenses, denounced Reagan's proposed initiative as "a declaration of a new arms race."⁵²

(U) In Congress, party affiliation tended to shape the tone and tenor of initial responses. Senator Daniel K. Inouye of Hawaii, who delivered the official Democratic rebuttal, nearly overlooked the President's strategic defense proposal, choosing instead to devote most of his criticism to the administration's "huge increases" over the past few years in military spending at the expense of domestic programs. What few remarks he made about the President's "Star Wars scenario," as he characterized it, were meant to cast doubt on its prospects for success in recruiting trained personnel to staff it due to alleged administration cutbacks in education funding.⁵³

⁵⁰ Author's interview with Sen. Malcolm Wallop, June 6, 1990.

⁵¹ Edward Teller, "Reagan's Courage," New York Times, Mar. 30, 1983: op-ed. page.

⁵² New York Times, Mar. 25, 1983: 8; Smith, "Reagan Plans New ABM Effort," 170.

⁵³ Congressional Record, Mar. 24, 1983, p. S3913.

(U) The day following the President's talk the House and Senate both allocated time for members to air their views, with liberal Democrats among the most eager to speak. Many members, including some Republicans, saw the President's proposal as a further step toward the militarization of outer space, a break with traditional policy. According to Representative Les AuCoin (D., Ore.), the President's views on strategic defense were "simplistic" and reflected his "fixation on doomsday weapons and military spending." Representative Ted Weiss (D., N.Y.), deploring what he termed "star war fantasies," saw the added danger that "Mr. Reagan seeks to elevate the current nuclear madness to a new dimension." And Representative Thomas J. Downey (D., N.Y.) dismissed the whole idea of strategic defenses as "most appalling and ridiculous." Indicative of the concerns of many were the remarks by Representative Jim Leach of Iowa, a Republican, who worried that the President's plan would turn out to be "awesomely expensive." As an alternative, Leach favored stepped up arms control efforts to ban weapons entirely from outer space. "It is time to recognize," he said, "that statesmanship must catch up to the realities of modern science." But Representative Ken Kramer of Colorado, another Republican, applauded the President's initiative, declaring it "possibly the greatest hope for mankind."⁵⁴

(U) Fewer spoke in the Senate, but they were no less opinionated. "At first glance," said Senator William Proxmire (D., Wis.), "this is an appealing proposal, but actually it could be a very dangerous development." A veteran of the debate over ABM, which he had opposed, Proxmire revived the argument that strategic defenses "are the most destabilizing factor in the nuclear age" and would inevitably invite counter-measures that would end up spreading the arms race. But Republican Senator John Warner of Virginia tried to put the matter in perspective by pointing out that what the President urged was fully consistent with ongoing research programs approved by Congress. Another Republican, Senator Jesse Helms of North Carolina, one of the leading conservatives in Congress and a High Frontier supporter, hailed the President's speech as having "turned a historic page." "For the first time," Helms said, "a President of the United States has

⁵⁴ *Ibid*, pp. H1700-H1704.

turned away from the incongruous doctrine known as MAD--Mutual Assured Destruction--and chosen to develop systems that can defend the American people."⁵⁵

(U) Opinion polls--widely read and respected on Capitol Hill as well as at the White House, but notoriously unreliable on complex technical issues--suggested that the American public, like Congress, was also of two minds about the President's proposal. Shortly after Reagan's speech a CBS-New York Times poll and an ABC-Washington Post poll both confirmed that the public strongly favored the development of defensive weapons, by as much as 54 to 37 percent of those contacted in the ABC-Washington Post survey. But that same poll also found that an even larger margin--57 to 24 percent--thought that development of defensive weapons by the United States would increase the risk of escalating the arms race with the Soviet Union. A Harris Survey conducted at this same time reported much the same sense of mixed public feelings. While most of those polled agreed that it might be possible to develop effective defenses against nuclear weapons, the vast majority (71 to 25 percent) thought that these same defenses would threaten mankind with new and frightening wars in outer space. By 61 to 32 percent, respondents also felt that, since it would take many years to perfect the defenses Reagan envisioned, his proposal did very little to ease anxieties over the possibility of nuclear war in the next 20 to 30 years. Summing up its findings, the Harris Survey concluded that Reagan might have inadvertently undermined his own proposal by making Americans "more apprehensive" about the prospects of a devastating nuclear war.⁵⁶

(U) Given the wide ranging and often emotional responses that the President's speech elicited, there could be little doubt that Reagan had touched a raw political nerve. Indeed, in only a short while it became clear that he had set off a political controversy the likes of which he almost certainly had never intended. Thus, in the days and weeks following the address, he and senior aides began backtracking, stressing the limited nature of the defensive initiative and its scientific rather than military orientation. At an impromptu press conference two days after the speech,

⁵⁵ *Ibid*, pp. S3932, S3940-S3941, S3960-S3961, S3966.

⁵⁶ CBS-New York Times Poll, Apr. 15, 1983; ABC-Washington Post Poll, Apr. 13, 1983; and Harris Survey, Apr. 14, 1983, all available through American Public Opinion Data (microfiche), Pentagon Army Library Collection.

Reagan conceded that he had no idea "how long it will take" to develop the defensive system he had described, nor indeed whether such a system would prove feasible.⁵⁷ Less than a week later, in an apparent effort to mute criticism that a U.S. defensive shield would lessen the threat of mutual vulnerability and thus promote strategic instability, Reagan told a gathering of reporters that he saw no reason why the United States should not consider sharing with the Soviets whatever discoveries in defensive technologies it eventually developed.⁵⁸ As for the scale and scope of the proposed program, Secretary of Defense Weinberger downplayed rumors that the administration planned a "crash" effort on a par with "a Manhattan Project-type of thing."⁵⁹ The initial aim, he insisted, would be a cautious and calculated research effort to counter Soviet ICBMs because they, more than any other Soviet strategic weapons system, posed the gravest, most immediate danger.⁶⁰

(U) In a further clarification of the President's intentions, the White House on March 25, 1983, announced that a National Security Decision Directive (NSDD 85) had been issued seeking "guidance necessary to develop research and development goals." "I would like," Reagan stated in explaining his ultimate purpose, "to decrease our reliance on the threat of retaliation by offensive nuclear weapons and to increase the contribution of defensive systems to our security and that of our allies."⁶¹ To assess the various problems and possibilities, the President in June approved a study directive (NSSD 6-83) authorizing two inquiries--one by a group called the Defensive Technologies Study Team (DTST), chaired by James C. Fletcher, former director of the National Aeronautics and Space Administration, to advise on the scientific and technical aspects of the problem; the other, a

⁵⁷ Remarks and a Question-and-Answer Session With Reporters on Domestic and Foreign Policy Issues, Mar. 25, 1983, Public Papers of the Presidents of the United States: Ronald Reagan, 1983 (Washington, D.C.: G.P.O., 1984), 448.

⁵⁸ "Question-and-Answer Session With Reporters on Domestic and Foreign Policy Issues," Mar. 29, 1983, *ibid*, 465.

⁵⁹ Weinberger Interview on NBC-TV "Meet the Press," Mar. 27, 1983, Public Statements of Caspar W. Weinberger, Secretary of Defense, 1983, vol. III, 1842.

⁶⁰ Remarks by Weinberger to Aviation and Space Writers Association, Arlington, Va., Apr. 11, 1983, *ibid*, 1885-1886.

⁶¹ White House Announcement on the Development of a Defensive System Against Nuclear Ballistic Missiles, Mar. 25, 1983, Public Papers of the Presidents of the United States: Ronald Reagan, 1983, 458-459.

study of the defense and strategic implications, coordinated by Franklin Miller, director of Strategic Forces Policy in OSD, working in collaboration with a group of outside experts, the Future Security Study Group (FS3) under Fred C. Hoffman of Panheuristics, a California think-tank.⁶² But since the results of the requested inquiries would not be available for some months--October 1 was the deadline--commentators and politicians were left to speculate on their own as to how and whether the President's vision might be realized.

The Scowcroft Commission Report

(U) A related development was the release in early April 1983 of the report by the President's blue-ribbon Commission on Strategic Forces, headed by retired Air Force Lt. General Brent Scowcroft. Members of Congress reacted with considerable interest. Although the bulk of the commission's report dealt with offensive systems, focusing on deployment options for the MX missile, its comments on defensive weaponry were especially pertinent in view of the President's recent speech on the subject.

(U) The Scowcroft commission, while impressed by recent progress in ballistic missile defense research, was not overly optimistic about the foreseeable prospects for deployment. Indeed, its report concluded that "applications of current technology offer no real promise of being able to defend the United States against massive nuclear attack in this century." "An easier task," the commission advised, "is to provide ABM defense for fixed hardened targets, such as ICBM silos." Additionally, while welcoming further research into BMD technologies, the report endorsed doing so chiefly "to avoid technological surprise from the Soviets." Of greater importance, the commission believed, "is the ability [of the United States] to counter any improvement in Soviet ABM capability by being able to maintain the effectiveness of our offensive systems."⁶³

⁶² NSSD 6-83, Rankine Notebooks, vol. I, SDIO Historian.

⁶³ U.S., President's Commission on Strategic Forces, Report of the President's Commission on Strategic Forces (Washington, D.C.: The Commission, 1983), 9-10, 12.

(U) Despite the report's qualified endorsement of strategic defenses, members of the commission were in fact exceedingly skeptical that such systems had much practical value. Testifying before the House Armed Services Committee on April 20, General Scowcroft repeatedly hedged his support of strategic defenses and made clear that he had more confidence in systems of mutual deterrence based on counterbalancing offensive retaliatory capabilities. In Scowcroft's opinion, given the "present state of technology," the only conceivable deployment option for strategic defenses would be in limited situations, such as protection of ICBM silos or multiple protective shelter systems. In such circumstances, he allowed, "you would have enormous leverage for an ABM system." But Professor John M. Deutch of the Massachusetts Institute of Technology, another commission member, doubted even these benefits. According to Deutch, there was nothing on the horizon, so far as he knew, that could be deployed within the next ten years that "would have very much effectiveness." And, he added, whatever might be available eventually was likely to be "extraordinarily costly."⁶⁴ Obviously, no matter how the administration decided to proceed, the President's strategic defense initiative was bound to provoke controversy and conflicting opinion.

Authorization and

Appropriations: FY 1984

(U) Although the President's announcement of March 23, 1983, came too late for inclusion of a specific spending request in his FY 1984 budget, then pending in Congress, it nonetheless played a part in the ensuing congressional action on the defense authorization and appropriation bills for the upcoming year. Indeed, once the President made his intentions known, Congress, realizing that a major new program was in the offing, suddenly became more attuned to the problems of ballistic missile defense than it had been for years. But with no specifics yet offered, members of both houses felt free to continue pushing their own "pet" projects and programs. Thus, while

⁶⁴ U.S. Congress, House, Committee on Armed Services, Hearings: Department of Defense Authorization of Appropriations for Fiscal Year 1984, Pt. 2, Strategic Programs, 98:1 (Washington, D.C.: G.P.O., 1983), 91, 102.

sentiment in Congress was inclined to support more research, it was far from clear that the results would later accord with what the administration might want to pursue under the President's initiative.

(U) Of keen interest in both houses of Congress was the impact the President's strategic defense initiative would have on the military services' ongoing directed energy programs. Especially concerned was the Democrat-controlled House Armed Services Committee, which on May 11, 1983, reported a FY 1984 defense authorization bill containing roughly the same amount of money requested by DoD to develop various laser and other directed energy weapons systems that were expected to provide much of the wherewithal for the President's objective of a nation-wide missile defense capability. But as it had the year before, the committee, at the urging of its subcommittee on research and development, substantially reallocated funds for directed energy research, arguing that the Department of Defense should do more to exploit the potential of shorter wavelength laser technologies. From a total of \$462 million requested for various programs with some relationship to antimissile laser systems, the committee cut \$163 million and added \$125 million for its own preferred purposes.⁶⁵ In addition to recommending increased funding for shorter wavelength lasers, the committee urged termination of several competing projects being conducted in conjunction with the DARPA Triad experiments, including the Air Force Airborne Laser Laboratory (ALL), which was due to be phased out anyway, and the Air Force Space Laser Technology program. The committee also endorsed and appended an unrequested sum of \$7 million for Army-sponsored experiments with neutral particle beam technology, which the panel believed capable of providing "a highly effective space-based BMD capability."⁶⁶ The House, in acting on the committee's report, adopted its directed energy recommendations en toto, cutting back or eliminating those programs the committee opposed and adding an unrequested \$80 million for Air Force research and development

⁶⁵ Congressional Quarterly Almanac, 1983, p. 176.

⁶⁶ H. Rpt. No. 98-107, pp. 130-132, 139.

on shorter wavelength laser technology, which the House called the Visible/Ultraviolet Strategic Laser program.⁶⁷

(U) In the Republican-controlled Senate, the tendency was to be more accommodating in dealing with the administration's research budget requests. Indicative of the revived interest in ballistic missile defense that the President's March 23 speech had aroused, the Senate Armed Services Subcommittee on Strategic and Theater Nuclear Forces reopened hearings on May 2, 1983, to give members of the Senate, senior administration witnesses, and outside experts an opportunity to comment on the President's plan and the compatibility of the current budget request with long-term goals. The lead-off witness, Senator Malcolm Wallop, used the occasion to lay the groundwork for an amendment he intended to offer to increase funding for space-based lasers. "There should be no doubt," he insisted, "that enough technology is in hand for us to build space-based chemical lasers. . . . There is no technical reason for us not to try to do it as soon as possible."⁶⁸ But according to Dr. Robert Cooper and other administration spokesmen, the technological base on which Wallop's proposed system rested was too primitive to meet the President's objectives. "The President has indicated that our efforts should be focused on the long term," Cooper said. "We are not interested in premature commitments to near-term weapon system concepts which will certainly have limited effectiveness."⁶⁹

(U) Undeterred, Wallop on June 8 met with Reagan at the White House to urge more aggressive pursuit of the aims outlined in the President's March 23 speech. Among the several steps he recommended, Wallop proposed that the President appoint a high-ranking special assistant to begin coordinating the efforts of the various departments and agencies involved; solicit independent recommendations directly from leading figures in the aerospace industry; and support the senator's amendment to the defense authorization bill. Reagan apparently declined to commit himself, but

⁶⁷ S. Rpt. No. 98-213, p. 188.

⁶⁸ Wallop testimony, May 2, 1983, U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1984, Part 5, Strategic and Theater Nuclear Forces, 98:1 (Washington, D.C.: G.P.O., 1983), 2860-2861.

⁶⁹ Cooper testimony, May 2, 1983, *ibid*, 2884.

after the meeting he told his assistant for national security affairs, Judge William P. Clark, that once the studies being prepared under NSSD 6-83 were finished, he wanted to be in a position to "move out aggressively with a total coherent program." "To this end," Clark noted, "the President wants to solicit the advice and counsel from many different sources and feels that Senator Wallop's suggestions may offer some constructive means of fulfilling this goal."⁷⁰

(U) Meanwhile, on July 5, 1983, the Senate Armed Services Committee submitted its report on the FY 1984 defense authorization bill. By and large, committee members shared the administration's aversion to hasty action and adopted a wait-and-see attitude until more of the uncertainties surrounding the President's initiative were sorted out. Working with a different grouping of numbers than the House had used, the committee recommended no changes in the administration's request of \$269.5 million (the same as in FY 1983 allowing for inflation) for DoD research into strategic directed energy weapons. Under another title, the committee added \$50 million for laser experiments sponsored by the Department of Energy, thus bringing the total directed energy research budget to \$319.5 million. And finally, in what was clearly a rebuke of Wallop and others who championed early deployment of space-based missile defenses, the committee warned that "it cannot recommend at this time the addition of substantial funds to the development programs falling within this area nor can it advise a dramatic redirection of this program which would involve foreclosing present options in favor of certain others."⁷¹

(U) Nonetheless, when the bill reached the Senate floor on July 19, Wallop duly responded with an amendment to reallocate \$240 million for development and eventual deployment of space-based lasers. Arguing that adoption of the amendment would seriously prejudice the President's strategic defense initiative, the administration lobbied to have the measure quashed.⁷² In leading the fight against the amendment, Senator John Tower (R., Texas), chairman of the Senate

⁷⁰ Memo, Clark for Paul Thayer, DepSecDef, June 15, 1983, sub: Follow-up to Meeting between the President and Senator Malcolm Wallop [June 8, 1983], Rankine Notebooks, vol. 3, no. 2, SDIO Historian.

⁷¹ S. Rpt. No. 98-174, pp. 169-170.

⁷² See Ltr, DeLauer to Tower, n.d., Congressional Record, July 19, 1983, p. S10346.

Armed Services Committee, made this the focal point of his attack. "I believe that it is inappropriate," Tower said, "for the Senate to undertake so significant a redirection of our present research and development effort on laser weapons programs at precisely the same time that a distinguished, blue-ribbon panel of scientists and engineers is--at the express request of President Reagan--considering the optimum approach for the country to pursue in this area."⁷³ The final vote of 65 to 27 killing Wallop's amendment suggested similar thinking on the part of other senators.⁷⁴ Surprisingly, no one in the Senate at this time questioned the impact Wallop's amendment might have had on the ABM Treaty. Those concerns, though doubtless already on the minds of many, would emerge later.

(U) In contrast to the House-passed authorization bill, the Senate version kept nearly all of the administration's directed energy research programs intact. The only Senate cut was \$20 million taken from the Advanced Radiation Technology Program, which included operation of the Airborne Laser Laboratory, a minor setback compared with the wholesale reallocation of funds and restrictive language incorporated into the House bill. But as became clear during the course of the summer from private discussions between administration officials and professional House staff members, House conferees were likely to insist on only two points--elimination of the Airborne Laser Laboratory, and inclusion of sufficient funds for the Air Force to initiate a major short wavelength laser program. All else was negotiable.⁷⁵

(U) Preferring the Senate to the House-passed version of the authorization bill, the administration endeavored to persuade the House-Senate conference committee to recede to the Senate's language in most instances and to retain only \$20 million of the funds added by the House for short-wave lasers as the most money that could be efficiently utilized.⁷⁶ This effort proved

⁷³ *Ibid*, p. S10338.

⁷⁴ *Ibid*, p. S10346.

⁷⁵ Memo for the Record by Charles W. Cook (SAF/ALS), June 17, 1983, sub: DOD Strategy in Response to FY 84 HASC Budget Mark-up for Air Force Directed Energy Programs, Rankine Notebooks, vol. 2, SDIO Historian.

⁷⁶ Memo, Lamberson for Dir., PC&A, July 27, 1983, sub: Heartburn Letter to Joint Conferees, *ibid*.

moderately successful. In addition to settling on \$40 million for new short-wave laser research, the committee voted to terminate the Airborne Laser Laboratory and to establish a new program, known as the Strategic Laser System Technology Program, incorporating both the Air Force Space Based Laser program and the House-approved Visible/Ultraviolet Strategic Laser Technology program. In making these changes, the committee acknowledged that the findings of the Fletcher panel could indeed result in "very significant changes" in research priorities. Even so, the committee defended its actions as steps necessary to ensure continuity and continued progress: "By providing the identified, additional resources, the conferees hope to ensure that adequate funds are available in fiscal year 1984 for research and development of these promising technologies should the President decide to pursue them aggressively."⁷⁷

(U) Compared with the tussle over the authorization bill, the appropriations process was relatively straight-forward and noncontroversial, following for the most part the normal give-and-take of the legislative process. Once again, though, it was in the House where the administration experienced the most difficulties. These included cuts in directed energy programs by the House Appropriations Committee totaling \$62 million, largely because the proposed programs, like those authorized under the Strategic Laser Systems Technology program, seemed "both high risk and long term," an outlook somewhat at odds with that of the original sponsor, the House Armed Services Committee.⁷⁸ The Senate, adhering more closely to the administration's requests, actually added funds for directed energy research, arguing, as the appropriations committee put it in its report, that "the annual authorization reductions made to the program will only force continued milestone slippage and cost growth."⁷⁹ In ironing out a final budget, the conference committee, as it was prone to do, split the differences. Thus, of the several key programs in dispute, the conferees agreed to provide \$52.5 million for Advanced Radiation Technology, instead of \$42.5 million proposed by the House and \$62.5 million proposed by the Senate. The conferees also agreed to

⁷⁷ S. Rpt. No. 98-213, pp. 188-190.

⁷⁸ H. Rpt. No. 98-427, pp. 238-239.

⁷⁹ S. Rpt. No. 98-292, p. 178.

provide \$51.5 million for Strategic Laser Systems Technology, instead of \$40 million voted by the House and \$60 million recommended by the Senate. Of the sum provided, the joint conference apportioned \$28 million for space-based chemical laser systems and \$23.5 million for Visible/Ultraviolet Laser Technology.⁸⁰

(U) Thus, even while Congress stayed close to the administration's budget requests for directed energy research, the outcome from the administration's standpoint was a qualified victory. What was clear by the time Congress finished the FY 1984 budget was that no matter what the President might later propose, Congress was liable to operate to some extent on its own agenda, pressing where it saw fit its own preferred objectives. Nearly all members of Congress at this point professed support for directed energy and other research related to the objectives mentioned in the President's March 23 speech. But beyond research were the more difficult, expensive, and politically explosive questions of engineering development and eventual deployment, issues on which no consensus had yet to appear.

The People Protection Act

(U) In addition to its work on the FY 1984 defense budget, the House Armed Services Subcommittee on Research and Development, in collaboration with the Investigations Subcommittee, looked further into the problems raised by the President's speech in connection with a legislative measure, introduced in May 1983, called the People Protection Act. Co-drafted by Rep. Ken Kramer and Sen. William L. Armstrong, both conservative Republicans from Colorado, the People Protection Act (H.R. 3073) endeavored to translate into law the basic changes in strategic policy called for in the President's March speech, encouraging him "to implement those measures needed to protect people and to reduce dependence on nuclear retaliation strategies."⁸¹

⁸⁰ H. Rpt. No. 98-567, p. 68.

⁸¹ H.R. 3073, 98:1, printed in U.S. Congress, House, Committee on Armed Services, Hearing on H.R. 3073 People Protection Act, 98:1 (Washington, D.C.: G.P.O., 1984), 1-2.

(U) In using these goals as its frame of reference, H.R. 3073 followed in the train of both the President's pronouncements on the need for more effective defenses and the increasing disenchantment among conservatives with the theory of deterrence based on mutual assured destruction. Among its various provisions, the bill would have created a new agency to consolidate directed energy research, a new unified space command under the Joint Chiefs of Staff, and, as part of this, an Army ballistic missile defense command. The bill also would have given the Department of Defense a larger role in space activities, including operation of space-launch vehicles and manned space stations. And, in furtherance of these measures, it called for a reassessment of the 1972 ABM Treaty to determine whether continued adherence was in the best interests of the United States.⁸²

(U) By the time the House Armed Services Subcommittee got around to considering the People Protection Act in the fall of 1983, President Reagan had yet to make a final decision on the scale and scope of the strategic defense research program he would recommend to Congress in his next budget message. Meeting on November 7, the Defensive Technologies Executive Committee (EXCOM), chaired by Deputy Secretary of Defense Paul Thayer, endeavored to place an embargo on the release of any information concerning the program until the President made up his mind. This included a request that the subcommittees cancel their scheduled hearing on the People Protection Act or, barring that, that they conduct their business in closed session. When the committees insisted on going ahead with an open hearing on November 10, the administration had no choice but to cooperate, albeit reluctantly.⁸³

(U) Witnesses who asked or were called to testify covered the entire spectrum of opinion. In addition to Kramer and Armstrong, supporters of the bill included Edward Teller, Daniel O. Graham, political and strategic analyst Colin S. Gray, and former astronaut Edwin "Buzz" Aldrin. Among the critics and skeptics were Nobel laureate and physicist Hans Bethe, who submitted a written statement; Jeremy J. Stone, director of the Federation of American Scientists (FAS); Adm.

⁸² *Ibid.*

⁸³ Memo for the Record by BG Robert R. Rankine, Jr., USAF, Nov. 7, 1983, sub: Mins of 7 Nov 1983 Mtg of Defensive Technologies Exec. Comte (EXCOM), Rankine Notebooks, vol. 3, no. 2, SDIO Historian.

Noel Gayler, USN (Ret.) of the American Committee on East-West Accord; and Henry Kendall, co-chairman of the Union of Concerned Scientists (UCS). Organized in the early 1970s by a group of MIT physicists for the exclusive purpose of blocking ABM, the UCS remained staunchly opposed to any ballistic missile defense program. Those representing the administration were Under Secretary of Defense DeLauer; Richard N. Perle, Assistant Secretary of Defense for International Security Policy; and James C. Fletcher, head of the Defensive Technologies Study Team that had been tasked to lay out the architecture of the President's program.

(U) The testimony for the most part followed predictable lines, which even at this early stage in the debate were becoming distinct. Supporters of strategic defenses welcomed the People Protection Act for the change of philosophy it represented, praised the President's initiative, and lauded its strategic objectives. Opponents, on the other hand, warned of an impending new arms race in space, questioned the technical feasibility of fool-proof defenses, and looked with dismay on the implications for the 1972 ABM Treaty.⁸⁴

(U) The most interesting revelations to come out of the hearing were those from administration witnesses, who for the first time offered Congress an authoritative glimpse at some of the concrete proposals the President would later offer, based on the recommendations of the Fletcher panel. Although the details of the panel's findings, submitted to the President in October, were still classified, reports appearing in the press indicated that the panel had endorsed a forward-looking research program covering a variety of technologies.⁸⁵ The program's basic aim, as the hearing confirmed, would be a five-year effort to ascertain the feasibility of a multiple layered system of ground- and space-based defenses, using advanced systems, with some prospect of deployment around the turn of the century. Elaborating on how the panel had arrived at its recommendations, Fletcher explained: "Our methodology during the study was to identify the 'long poles' in the technological tent. By this I mean those technological questions upon which the success,

⁸⁴ For a summary of the proceedings, see Alan Sweedler, "Congress and the Strategic Defense Initiative," in Gerald M. Steinberg (ed.), Lost in Space: The Domestic Politics of the Strategic Defense Initiative (Lexington, Mass: D.C. Heath, 1988), 56-58.

⁸⁵ See for example Clarence A. Robinson, Jr., "Panel Urges Defense Technology Advances," Aviation Week & Space Technology, Oct. 17, 1983: 16-18.

or even the feasibility of a comprehensive ballistic missile defense rests." As one example, he cited the perennial problem of being able to distinguish between warheads and decoys.⁸⁶

(U) Of special interest was the testimony presented by DeLauer, who shocked and irritated many of President's supporters by what seemed a tepid endorsement of strategic defenses. In elaborating on the Fletcher panel's recommendations, DeLauer noted that they were "very expensive and they're extensive and we intend to do them." But, he cautioned, much important research remained, especially in the crucial area of survivability. "The most fragile part of this whole concept," he said, "whether systems are on the ground or in space, but particularly in space, is the ability to survive any counteraction that might be taken against it."⁸⁷

(U) Nor was DeLauer sanguine about the ultimate costs of realizing the President's vision. Prior to the President's March speech, he noted, the administration had already planned expenditures over the next five years for strategic defense research of between \$10 and \$18 billion. As a result of the Fletcher panel's findings, he projected increases of between twenty-five and fifty percent. Comparing costs with the Apollo moon program and the Manhattan Project, DeLauer indicated that the expense of developing and deploying missile defenses would dwarf any previous technological undertaking of its kind. "When the time comes that you deploy any one of these technologies," he said, referring to the various avenues the Fletcher panel had urged exploring, "you'll be staggered at the cost that they will involve."⁸⁸

(U) DeLauer's comments and revelation that the administration had no intention of embarking upon early deployment of space-based missile defenses drew pointed criticisms from some of the President's stoutest supporters, Daniel O. Graham especially. As Graham saw it, the decision by the Fletcher panel to stress research over the actual development of weapons was a step backward. In fact, he insisted, "an effective, not perfect, defense" could be deployed in five to six years using kinetic energy kill systems. The technology for such protection, he insisted, "is

⁸⁶ HCAS, People Protection Act, 147.

⁸⁷ *Ibid*, 19.

⁸⁸ *Ibid*, 23-26.

essentially on the shelf."⁸⁹ But as administration spokesmen had stressed earlier and as they reiterated at the hearing, the purpose of the President's strategic defense initiative was to explore forward-looking strategies, not ones, as Graham conceded, that could be countered to some extent, possibly even overwhelmed, by existing offensive technologies. Even so, the issue of objectives was highly pertinent and would in the future receive extensive consideration in Congress.

(U) Although nothing materialized from the People Protection Act bill (it was never reported to either the House or Senate floor), it nonetheless helped lay out some of the more important issues in the subsequent debate over the President's strategic defense initiative. As with all major new policy departures, SDI raised questions of both near- and long-term significance which the hearing helped to identify. But since the administration had yet to propose a specific course of action, the feeling among many in Congress seems to have been that legislation like the People Protection Act was premature, possibly even prejudicial to congressional freedom of action. As ardent in their views as a handful of hard-core opponents and supporters of the President's initiative may have been, the vast majority in Congress were as yet unready to commit themselves, one way or the other, to what was looming increasingly as the most controversial and potentially most expensive defense program in the country's history.

⁸⁹ *Ibid*, 94-95.

CHAPTER III

A CAUTIOUS BEGINNING (1984)

(U) The President's budget for Fiscal Year 1985, which went to Congress on February 1, 1984, was the first to include specific funding requests for the Strategic Defense Initiative. At the time the budget was submitted, however, administrative arrangements for the program and even many of its details were still being worked out between the Pentagon and the White House. The immediate effect was to raise questions in Congress concerning both the near-term and longer-term goals of SDI, questions that administration spokesmen were at times hard-pressed to answer. Not until the appointment in March 1984 of Lt. Gen. James A. Abrahamson, USAF, as director of the program and the chartering the following month of the Strategic Defense Initiative Organization (SDIO), did a semblance of order, cohesion, and purpose begin to appear. But by then Congress was well along with the authorization and appropriation process.

The Administration's Program

(U) The specific proposals that President Reagan submitted for FY 1985 followed closely the recommendations of the Defensive Technologies Study Team (DTST), one of three fact-finding and advisory panels created in June 1983 to give substance to the policy outlined in his speech of March 23, 1983 (see Chapter II). The other two panels were the Future Security Strategy Study Team (FS3), headed by Fred S. Hoffman of Panheuristics, a California think-tank; and the Interagency Working Group, coordinated by Franklin C. Miller, director of Strategic Forces Policy in the Office of the Under Secretary of Defense for Policy.¹ All three completed and submitted their findings in October 1983, after which the Senior Interagency Group (SIG), composed of ranking DoD, State Department,

¹ For an overview of the work done by these panels, see Donald L. Hafner, "Assessing the President's Vision: the Fletcher, Miller, and Hoffman Panels," in Franklin A. Long, Donald Hafner, and Jeffrey Boutwell (eds.), Weapons in Space (New York: Norton, 1986), 91-107.

and other agency officials, oversaw the preparation of specific policy recommendations for the National Security Council. The task of honing budget estimates fell to a group in the Pentagon known as the Defensive Technologies Executive Committee (EXCOM), chaired by Deputy Secretary of Defense Paul Thayer.

(U) Of the three study groups, it was the DTST, or Fletcher panel as it was more commonly known, that received the most public attention, chiefly because of the formative influence its findings seemed destined to have on SDI. Comprised of more than sixty members, the Fletcher panel was broadly representative of industry, government, and the academic and scientific communities. All who served on the panel also had had considerable experience in defense matters. They reported to the Under Secretary of Defense for Research and Engineering, Richard DeLauer, who, along with the President's scientific advisor, George Keyworth, was largely responsible for setting the panel's frame of reference. In interpreting the President's ultimate objective, DeLauer, Keyworth and others encouraged Fletcher and his colleagues to look beyond current state-of-the-art technologies that did not have the growth potential to meet longer term threats that could result from Soviet counter-measures or proliferation unconstrained by arms control agreements. "We are not interested in nor will we be making commitments to near-term weapon system concepts," said DeLauer in describing the panel's purpose. "Such pursuits would detour us from developing those technologies that may eventually lead to truly effective capabilities."²

(U) The reasons for adopting such an approach may well have been as much political as technical. Despite objections from Sen. Malcolm Wallop, Daniel O. Graham of High Frontier, and others who wanted SDI to pursue weapons development immediately, Keyworth strongly resisted any commitment to an early deployment option because, given the state-of-the-art, he argued, it would inevitably involve some use of ground-based missile interceptors, a concept that Congress had not supported in the past. Rather than jeopardize the program's chances in Congress with a specific

² "The DoD View of the Next 20 Years in Space," Speech by Richard D. DeLauer to Defense Week Space Systems 2001 Conference, Sep. 19, 1983, Directorate of Technology files, SDIO.

commitment to produce weapons, Keyworth preferred to emphasize its research aspects.³ Accordingly, the Fletcher panel shunned weapons engineering and organized its investigation around what panel members believed to be the five most crucial long-term scientific and technological subjects: surveillance, target acquisition, tracking, and kill assessment (SATKA); directed energy weapons (DEW), such as lasers and particle beams; non-nuclear kinetic kill weapons (KEW); systems concepts, battle management, and command, control, and communications (SC/BM/C3); and survivability, lethality, and key support technologies (SLKT). What finally emerged was a seven-volume classified study that became, for all practical purposes, the original blueprint of SDI.

(U) While the details of the seven-volume Fletcher report were classified, the Defense Department in April 1984 released an unclassified summary which essentially confirmed earlier press reports and testimony by administration witnesses before the House Armed Services Committee in connection with its consideration of the People Protection Act (see chapter II). One frequent criticism leveled at the DTST report, especially by liberal skeptics, was that Fletcher and his colleagues, because of their close DoD connections, were favorably disposed toward SDI to begin with, and tailored their report accordingly, leaving out or glossing over many critical unresolved technical problems.⁴ Adding to this controversy was a critique of the Fletcher report, published in April 1984, by Ashton B. Carter, an MIT physicist working under contract for the Office of Technology Assessment (OTA), a congressional research organization. According to Carter's analysis of the Fletcher report, its emphasis on the potential of new technologies, like directed energy weapons, was wholly misleading because of their unproven qualities. So much remained to be learned and developed, Carter argued, that it would be quite some time before there would be any likelihood of a change in the configuration of strategic forces, i.e., a predominance of defensive systems. As Carter saw it, even with the vigorous exploitation of these scientific breakthroughs:

³ (U) Memo, DeLauer for SecDef and DepSecDef, Oct. 17, 1983, sub: Prospects for a Nuclear Strategy with Increased Reliance on Defensive Systems, Rankine Notebooks, vol. 3, pt. 2, SDIO Historian.

⁴ See for example Tina Rosenberg, "Washington: The Authorized Version," The Atlantic (Feb. 1986), 26-30; and Hafner, "Assessing the President's Vision," 92-96.

The prospect that emerging "Star Wars" technologies, when further developed, will provide a perfect or near-perfect defense system, literally removing from the hands of the Soviet Union the ability to do socially mortal damage to the United States with nuclear weapons, is so remote that it should not serve as the basis of public expectation or national policy about ballistic missile defense. This judgment appears to be the consensus among informed members of the defense technical community.⁵

(U) The Fletcher panel's assessment, while not significantly different in substance from Carter's analysis, was considerably more upbeat in tone. Indeed, Fletcher and his colleagues readily conceded that formidable technological challenges lay ahead. But in the words of the published summary, they "finished their work with a sense of optimism" that vigorous research could overcome most obstacles.⁶ As a possible ultimate objective, the panel envisioned a multi-layered ballistic missile defense system organized in four phases: (1) a boost-phase during which the main rocket motors lift the payload through and out of the atmosphere; (2) a post-boost-phase during which enemy warheads and decoys are deployed; (3) a mid-course phase during which the warheads and decoys proceed to the target; and (4) a terminal phase during which the warheads reenter the atmosphere.⁷

(U) To determine the feasibility of such a system, the Fletcher panel recommended a five-year exploratory R&D program beginning in FY 1985. It also suggested several levels of funding ranging from totals of \$18 to \$26 billion depending on the scope and intensity of the research.⁸ As summarized in Figure III-1, the plan ultimately approved and forwarded by the President to Congress included a request for a first year appropriation of \$1.777 billion, which SDIO officials described as a \$250 million augmentation over former plans for SDI-related technology

⁵ Ashton B. Carter, Directed Energy Missile Defense in Space (Washington, D.C.: Office of Technology Assessment, Apr. 1984), 81.

⁶ U.S. Department of Defense, The Strategic Defense Initiative: Defensive Technologies Study (April 1984), 13.

⁷ *Ibid.*, 14-17.

⁸ Clarence A. Robinson, Jr., "Panel Urges Defense Technology Advances," Aviation Week and Space Technology, Oct. 17, 1983, 16.

development, chiefly to meet urgent requirements in the survivability and lethality areas of the program.⁹ However, administration estimates for SDI's second year shot up to \$3.790 billion, an increase of 113 percent.¹⁰ Although the Defense Department declined in its initial submission to give Congress any further itemized budget breakdowns, the Congressional Budget Office (CBO), responding to a request from Sen. Larry Pressler (R., S. Dak.), assembled estimates of its own showing annual increases averaging 25 percent to carry the program through its remaining three years (see Figure III-2). The CBO further calculated that by the end of the initial five years of the program, SDI would rise from around 5 to 16 percent of the Defense Department's total RDT&E budget.¹¹

(U) Despite the Fletcher panel's overall tone of optimism, there were strong hints, even from the declassified summary, that its members doubted the feasibility of an impenetrable shield that would meet the President's vision of rendering the ballistic missile threat "impotent and obsolete." A more realistic goal, the panel suggested, would be a "low-leakage system." Similarly, the panel cautioned against expecting significant results in the near future, since the technologies under consideration, especially those in the directed energy area, were still highly experimental. Even though it might be possible to begin gradual deployment of portions of the system in the 1990s, the panel speculated that it would probably be sometime in the twenty-first century before an effective defense could be set in place.¹²

⁹ U.S. Congress, Senate, Committee on Armed Services, MDBO Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1985, Part 6, Strategic Defense Initiative, 98:2 (Washington, D.C.: G.P.O., 1984), 3031-3033.

¹⁰ Congressional Record, June 13, 1984, pp. S 7136-7137.

¹¹ "Analysis of the Costs of the Administration's Strategic Defense Initiative, 1985-1989," May 1984, Congressional Record, June 13, 1984, pp. S 7136-7137.

¹² Defensive Technologies Study, 2, 13.

Figure III-1

SDIO'S FY 1985 BUDGET SUBMISSION
(\$ in Millions)

SDIO Program Element	FY84 Approp in related areas	FY85 Planned before Mar 23, 1983	FY85 Request
Surveillance, Acquisition, Tracking, & Kill Assessment (SATKA)	\$ 366.5	\$735.7	\$721
Directed Energy Weapons (DEW)	322.5	369.1	489
Kinetic Energy Weapons (KEW)	195.8	296.1	356
Systems Concepts/Battle Mgt/C3 (SL/BM/C3)	82.7	89.5	99
Survivability, Lethality, & Key Support Technologies (SLKT)	23.5	36.6	112
TOTALS	\$ 991.0	\$1527.0	\$1777

Source: U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1985, Pt. 6, 98:2 (Washington, D.C.: G.P.O., 1984), 3033.

Figure III-2

CBO Projected Budgets for SDI, 1985-1989
(\$ in Millions)

FY 1985	\$ 1,777
FY 1986	3,790
FY 1987	4,989
FY 1988	6,260
FY 1989	7,406
Total	\$24,222

Source: "Analysis of the Costs of the Administration's Strategic Defense Initiative, 1985-1989," May 1984, Study prepared by the Congressional Budget Office, printed in U.S. Congressional Record, June 13, 1984, pp. S 7136-7137.

(U) A matter not directly pertinent to the Fletcher panel's work, but one that came up often in its discussions anyway, was the nature of the organization that would oversee and administer the program. Because a revitalized and enlarged BMD effort was likely to compete for funds with other defense programs, it seemed clear that, for SDI to be able to lay claim to the resources it would need, it would have to have priority standing within the Defense Department bureaucracy. Accordingly, in chartering the Strategic Defense Initiative Organization, Secretary Weinberger gave its director "overall responsibility for managing the program" and placed the organization under his own office. This not only highlighted the importance of SDIO; it also accorded its director unhampered access to the secretary of defense, a privilege (and power) that few others in the Pentagon had.¹³ Initially, Weinberger wanted to appoint a civilian director on the assumption that a civilian might work better with Congress than someone from the military. But when a suitable civilian candidate failed to materialize, he turned to Lt. Gen. James A. Abrahamson, former head of the F-16 fighter program, who was then winding up a tour of duty as associate administrator of NASA in charge of the space shuttle program.¹⁴

(U) Less well publicized than the Fletcher report were the findings of the Future Security Strategy Study Team, or Hoffman panel. Like the Fletcher team, Hoffman and his group, who released an unclassified summary of their findings in October 1983, saw the President's strategic defense initiative as a promising idea that needed to be actively pursued, especially as a means of "reducing reliance on threats of massive destruction that are increasingly hollow and morally unacceptable."¹⁵ Where the two reports differed were, first, in their assessment of the scope of protection that strategic defenses should offer, and, second, in their respective time frames for development and possible deployment. While the Fletcher panel shunned serious evaluation of

¹³ Memo, Weinberger for DepSecDef, et. al., Apr. 24, 1984, sub: Management of the Strategic Defense Initiative, reprinted in U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1985, Pt. 5, 98:2 (Washington, D.C.: G.P.O., 1984), 696-699.

¹⁴ Author's telephone interview with Abrahamson, June 30, 1991.

¹⁵ Fred S. Hoffman, Ballistic Missile Defenses and U.S. National Security: Summary Report (Oct. 1983), 1-4.

near-term weapons systems, the Hoffman report accorded special attention to what it termed "intermediate options." Although it paid lip service to "a nearly leakproof defense" as the ultimate outcome, the report stressed that "partial systems, or systems with more modest technical goals, may be feasible earlier than the full system." Among those the report favored were an antitactical missile system for use in Europe, in part to reassure the NATO allies that the United States was still committed to their defense; protection of "critical installations" in the United States, like missile silos and C3I nodes; and a fairly rudimentary space-based boost-phase intercept system.¹⁶

(U) The third study team, the Interagency Working Group under Franklin Miller, combined policy and technical considerations to address a somewhat broader range of problems than either of the two other studies. In addition to an overall analysis, the Miller report included six appendices containing interagency analyses on deterrence and defense criteria, possible Soviet responses, arms control, foreign policy considerations, the effect on third country nuclear systems, and the effect on U.S. nuclear non-proliferation policy.¹⁷ Although the full report remained classified, the Defense Department in April 1984 did issue a pamphlet incorporating some of its findings.¹⁸ About this same time, the Senate Armed Services Committee asked for a copy of the Miller report, but was told by the administration that it was an executive document not subject to release to Congress.¹⁹ That Congress was denied such information later provoked charges by journalist Tina Rosenberg that senior officials considered the Miller report an embarrassment, potentially threatening to the SDI program, and that they did their best to suppress its contents. Miller, in a published rebuttal, rejected the charge.²⁰

¹⁶ *Ibid.*

¹⁷ Memo, Franklin Miller for BG Robert R. Rankine, Jr., Oct. 13, 1983, sub: FSS Study, SDIO Historian files.

¹⁸ See U.S. Department of Defense, Defense Against Ballistic Missiles: An Assessment of Technologies and Policy Implications (April 1984).

¹⁹ U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1985, 98:2 (Washington, D.C.: G.P.O., 1984), 2950.

²⁰ Rosenberg, "Washington: The Authorized Version," 26-30. For Miller's rebuttle, see his letter to the editor in The Atlantic (June 1986), 7.

(U) Actually, the Miller report's findings were no more critical of the technical prospects for SDI than were those of either the Fletcher or Hoffman panels. Where differences arose was in their respective perspectives. Unlike the two other panels, which were composed of outsiders, the Miller group consisted entirely of administration officials actively engaged in the ongoing problems of strategy and policy. As one observer put it, while the Fletcher and Hoffman panels disbanded once their work was done, "the members of the Miller panel returned to their desks within the bureaucracy, to begin implementing the president's strategic defense program."²¹ Faced with the day-to-day problems of trying to turn the President's vision into reality, their thinking tended to run along somewhat different lines from that of the other panels. What bothered many who sat on the Interagency Working Group was not so much the feasibility of achieving effective strategic defenses, but what would happen in the interval between the end of the research phase and the completion of actual deployment, when the strategic environment was likely to be in a state of flux.

(U) At no time during the preparation of these three studies did the administration consult with or seek out the views of Congress. For those working on the Fletcher panel, in fact, contacts with Congress were strictly prohibited.²² Although this may not have been unusual since the job of putting a program together is traditionally the task of the Executive Branch, it may be that much of the later debilitating controversy over SDI could have been avoided had key members of Congress been part of the early planning process and thus responsible to some degree for sorting out policy goals and assessing the prospects. As it happened, it was not until mid-December 1983 that senior White House and Pentagon officials held their first consultations with ranking senators, representatives, and their aides to brief them on the details of the President's plans for SDI.²³ But by then the major decisions had been taken, leaving Congress little say in the matter other than to mull over and react to what the President wanted.

²¹ Hafner, "Assessing the President's Vision," 96.

²² Author's interview with Lt. Gen. Kenneth B. Cooper, USA (Ret.), Mar. 10, 1989.

²³ Memo, Col. John H. Stanford, USA, for Special Assistant to the President for National Security Affairs, [ca. Dec. 6, 1983], sub: SDI Congressional Consultation, with enclosures, Rankine Notebooks, vol. 4, SDIO Historian.

The FY 1985 Authorization:

Committee Actions

(U) The second session of the 98th Congress took up the President's SDI budget request for FY 1985 at a time of growing political controversy over government spending in general and defense needs in particular. Not only was there the added pressure of national elections pending at the end of the year, but also there was increasing unease on Capitol Hill over the country's escalating budget deficit, over the administration's continuing strong emphasis on military as opposed to domestic programs, and over the apparent faltering of arms control negotiations in Geneva, as indicated by the Soviet Union's unilateral decision the previous November to suspend further talks on limiting strategic and intermediate-range nuclear weapons. Thus framed, what the ensuing debate over the SDI budget came down to was a question of priorities and whether SDI, because of the enormously difficult technical problems yet to be overcome, really merited the attention and fiscal support the President thought it should have, not only in 1985 but in future years.

(U) Fueling the expectations of SDI's proponents that it would survive and indeed prosper politically were opinion polls which suggested a steady buildup of public support for the program as people learned more about it. According to a Harris Survey conducted in June 1984, the public continued to have mixed feelings about SDI and, as yet, was not convinced that it merited the investment of large sums of money.²⁴ But other polls done over the course of the year indicated that this mindset was changing and that the public's attitude toward SDI was growing more favorable, with equally strong support (75 percent in one poll) among samplings taken of registered voters of both political parties as well as independents.²⁵ Although it is difficult to establish a direct correlation between the results of opinion polls and votes in Congress, it seems clear that initially at least SDI commanded a strong enough popular following that most in Congress felt compelled to

²⁴ Harris Survey, June 28, 1984, American Public Opinion Data (microfiche).

²⁵ For a survey of opinion polls, see Keith B. Payne, Strategic Defense: "Star Wars" in Perspective (Lanham, Md.: Hamilton Press, 1986), 234-247.

support the program. What remained to be seen was how durable this public support of SDI would prove to be and how, in the event, Congress would react.

(U) In March and April 1984, following customary procedure, the House and Senate Armed Services Committees held hearings on SDI as part of their overall consideration of the FY 1985 defense authorization legislation, after which they submitted their reports and recommendations. These hearings, as Alan Sweedler has pointed out, differed considerably from those held the previous November on the stillborn People Protection Act.²⁶ This time administration witnesses came equipped with detailed prepared statements, viewgraphs, and other materials designed to convey the seriousness of their purpose and of their commitment to the program. Mindful no doubt of opinion polls and with SDI still in its infancy, almost all who sat on these committees agreed that the President's Strategic Defense Initiative was an idea worth exploring; where they disagreed with the administration most often was over the scale and scope of the proposed program and whether it would retain sufficient public backing to sustain the large claim on resources that SDI might ultimately consume.

(U) The inquiry conducted by the House Armed Services Subcommittee on Research and Development was, for the most part, routine and uneventful. Dominated by a handful of elderly, conservative Democrats, the committee had a reputation for usually tilting in favor of Pentagon requests and of being more "pro-defense" than the bulk of its House colleagues.²⁷ Both its chairman, Melvin Price (D., Ill.), who also headed the full committee, and the subcommittee's senior staff member, Anthony R. Battista, had in the past shown considerable interest in and support for SDI-related research, most notably shortwave laser technology. At one point during the hearings, while discussing the technical problems involved with SDI, Battista remarked: "It is a hard job, but

²⁶ See Alan Sweedler, "Congress and the Strategic Defense Initiative," in Gerald M. Steinberg (ed.), Lost in Space: The Domestic Politics of the Strategic Defense Initiative (Lexington, Mass.: D.C. Heath, 1988), 59.

²⁷ For a profile of the committee, see "Democrats' Panel Defends More for Defense," Congressional Quarterly Weekly Report, Mar. 31, 1984: 729-736.

certainly one that's not impossible in our view."²⁸ Most subcommittee members tended to exhibit a similarly sympathetic view, not wanting to thwart research programs that might yield future benefits. But beyond this was the larger question of production and deployment, on which subcommittee members almost uniformly eschewed commitment.

(U) In pressing their case for approval of the President's \$1.777 billion funding request, administration spokesmen stressed two points: first, that SDI was not a "new start" in the usual sense of being a totally new program, but rather, as Under Secretary of Defense DeLauer described it, "a redirection of many technical efforts that we've been carrying on for the last decade"; and second, that SDI or something like it was necessary in any case as a prudent hedge against the possibility of unilateral Soviet development and deployment of sophisticated space-based defenses.²⁹ Responding to concerns voiced in this last regard by one committee member, Franklin Miller observed that: "Clearly if the Soviets are able to develop a system and we have no counterpart, then deterrence would be reduced to a very low order. Stability would be greatly undercut."³⁰

(U) The subcommittee's interests spanned the entire spectrum of problems SDI might encounter, from its technological feasibility to its compatibility with the terms of the 1972 ABM Treaty. But with only two hearings (one on March 1, the other on March 20) devoted to examining these issues, it was difficult for the subcommittee to delve too deeply. In these circumstances it was the program's most salient feature--its costs, actual and potential--that stirred the most interest. Although a supporter of SDI, Rep. Frank McCloskey (D., Ind.) worried that funding for the five-year research phase could easily escalate to as high as \$39 billion. McCloskey agreed that SDI was a worthy project but "probably not in the scope that is being proposed."³¹ Rep. William L. Dickinson (R., Ala.), another SDI supporter and ranking Republican on the House Armed Services

²⁸ U.S. Congress, House, Committee on Armed Services, Hearings: Department of Defense Authorization of Appropriations for Fiscal Year 1985, Part 4, Research, Development, Test, and Evaluation--Title II, 98:2 (Washington, D.C.: G.P.O., 1984), 487.

²⁹ *Ibid.*, 485.

³⁰ *Ibid.*, 497.

³¹ *Ibid.*, 1121.

Committee, basically concurred, conceding that budgetary constraints would be the controlling factor in determining the program's immediate future and perhaps its ultimate fate as well. "At a period of time," he observed, "when we're trying to look for ways to reduce spending, we're launching out on probably the largest joint program we've ever jumped into."³²

(U) Turning to witnesses critical of SDI the subcommittee took testimony from two prominent scientists--Hans Bethe, the Cornell University physicist and Nobel laureate; and Richard Garwin of IBM, also a physicist, whose involvement in nuclear weapons matters dated from the H-bomb project of the early 1950s. Both argued that on technical grounds SDI was impractical. "It is my judgment," said Garwin, "that we now know no way to provide a system which is effective enough and durable enough . . . to render the U.S. society and population invulnerable to nuclear weapons, even those delivered by ballistic missiles." Suggesting that the Fletcher panel and other proponents of strategic defenses had oversold the feasibility of SDI, Garwin thought that the American public was being grossly deceived and should be so warned. "I see to some extent," he said, "that the heads of Government are promising cake and the Department of Defense is organizing a program which will deliver crumbs." As an alternative to the proposed program in the Fletcher report, Garwin and Bethe favored a more modest research effort held to no more than \$1.5 billion annually over the next few years. Until further basic research had been done, Bethe also cautioned against any forward commitments to expensive undertakings such as demonstration projects.³³

(U) Members' concern over the budgetary implications of SDI was reflected in the full House Armed Services Committee's report of April 19. As a matter of policy the committee fully endorsed the aims behind the President's program and warmly applauded his desire "to abandon the concept of Mutual Assured Destruction in favor of a defensive program to counter the awesome Soviet nuclear threat." Nonetheless, after narrowly rejecting a larger cut, it recommended a 23 percent reduction in the amount requested (see Figure III-3), largely because it saw "concurrency in high risk technology areas," a lack of coordination with U.S. allies, and "poorly defined" allocation of resources

³² *Ibid*, 494.

³³ *Ibid*, 1104-1125.

within the program. As a first step toward overcoming these problems, the committee urged the Secretary of Defense to investigate the feasibility of establishing a liaison committee with American allies and a technical advisory board, and to report on the status of both prior to submission of SDI's 1986 budget.³⁴

(U) In going along with the committee's proposed budget cuts, Republican proponents of SDI like Dickinson cast the issue in purely fiscal terms. "The committee's action," Dickinson said on the House floor, "should not be interpreted as a lack of support for this program; rather, it is a budgetary decision based on the committee's belief that a long-term program of this nature must be reduced in order that shorter-term programs receive appropriate authorization for funding."³⁵ The full House, preoccupied with debate over other defense issues like MX procurement and chemical weapons production, accepted the committee's recommendations with only one minor change--an amendment adopted by voice vote earmarking \$10 million of the SDI budget for laser medical research.³⁶

(U) In the Senate Armed Services Committee, where Republicans exercised control, wrangling over the 1985 SDI authorization was much more spirited, even if in the end the committee's recommendation in favor of a \$1.627 billion spending bill was substantially closer to the amount requested than that voted by the House. The issues raised during the course of the investigation were essentially the same as those addressed during House consideration of the authorization bill, with the predictable result that not much new information turned up. But as an indication of Senate interests and worries, especially the concern of many members as to whether SDI was a sound concept from a strategic standpoint, these hearings nonetheless proved remarkably revealing.

(U) Like the House Armed Services Committee, the Senate's counterpart had a reputation for usually being pro-defense. Even so, it also included among its members several prominent liberal Democrats--Edward M. Kennedy of Massachusetts, Carl Levin of Michigan, and Gary Hart of

³⁴ H. Rpt. No. 98-691, pp. 8, 16-18.

³⁵ Congressional Record, May 15, 1984, pp. H 3909-3910.

³⁶ *Ibid*, H 4405.

Colorado, in particular--who were well known for their frequent criticism of defense programs. To offset and counter their expected attacks Republicans and pro-SDI Democrats on the committee knew that they would have to be as tough and thorough as possible in analyzing the administration's proposals, thus reducing the chances of adoption of crippling amendments once the authorization bill reached the Senate floor.

(U) The three separate days of hearings on SDI that the committee conducted, spread between early March and late April, were devoted mainly to taking testimony from administration witnesses, including an appearance on April 24 by Lt. Gen. Abrahamson, his first on Capitol Hill as director of the newly created Strategic Defense Initiative Organization. On March 2, as a prelude to the hearings, an SDIO briefing team held a two hour discussion with twenty Senate personal staff members representing eleven Republican and nine Democratic offices. In addition to Senators Kennedy and Levin, the only strong opponents of SDI represented at the meeting were Senators Lawton Chiles (D., Fla.), a member of the defense subcommittee of the Senate Appropriations Committee, and David L. Boren (D., Okla.), who served on the Senate Select Committee on Intelligence. They, along with Senators Larry Pressler (R., S. Dak.) and Paul Tsongas (D., Mass.), had in the past supported initiatives to keep any type of arms race out of space. Supporters of SDI represented at the meeting included Republican Senator Pete Wilson of California, who had recently taken a close look at the work being done in his state on SDI-related research and had chosen to make his endorsement of SDI a matter of record. Like other members of Congress from states with high-technology research potential, Wilson tacitly acknowledged that his constituents stood to gain considerably from the large number lucrative SDI contracts that would be awarded over the coming years.³⁷ Even so, based on the reactions of the attendees, the prospects of garnering more open endorsements in the near future were not encouraging; and there was the added complication that supporters of space defenses like Sen. Malcolm Wallop were threatening to block action on the MX

³⁷ See Pete Wilson, "'Star Wars' Defense Beats MAD Alternative," Los Angeles Times, Mar. 2, 1984/Pt. II, p. 5.

missile unless the administration accepted a more readily deployable short-term defensive initiative.³⁸ Although the threat failed to materialize, it still gave program managers something further to worry about as they surveyed SDI's chances in the Senate. All in all, as one of the organizers of the briefing put it: "We would expect the Senate to remain very cautious throughout this year--with very little positive rhetoric being expressed."³⁹

(U) The dominant theme throughout the Senate Armed Services Committee's inquiry was the cost of the program weighed against the potential benefits it would yield. Sen. Barry Goldwater (R., Arizona), a longtime advocate of a strong defense establishment, worried that SDI would divert resources from older, proven security systems. A firm adherent to the concept of mutual assured destruction, he saw little to be gained from pursuing alternative defensive strategies such as those embodied in SDI. "I have always believed," Goldwater said, "that the best defense is a strong offense and I think that will be the case for a long time. . . . If we try to develop such a system [as SDI] at the expense of a proven offensive system, we will be making a mistake."⁴⁰

(U) Others, following the lead of Sen. Sam Nunn (D., Ga.), widely respected as one of the most knowledgeable members of Congress on defense matters, saw the principal problem facing SDI as a shift of objectives away from what the President had originally envisioned. In a prepared statement issued at the outset of the committee's hearings, Nunn questioned whether a "highly reliable population defense" was in fact attainable. Apparently alluding to the qualifications in both the Fletcher and Hoffman reports, Nunn added that it was his understanding that the program's directors were already beginning to consider somewhat less ambitious goals such as the defense of ICBM silos. If this were the case, then Nunn believed that the American people were being misled

³⁸ Memo for the Record by Maj. Simon P. Worden, USAF, Feb. 6, 1984, sub: Mtg with Sen. Wallop, 6 Feb 84, Rankine Notebooks, vol. 6, SDIO Historian; Memo for the Record by MG E.R. Heiberg III, BMD Program Manager, Feb. 7, 1984, sub: Visit to Sen. McClure, *ibid.*

³⁹ Memo, Jon A. Anderson for BG Robert R. Rankine, Jr., Mar. 5, 1984, sub: SDI Presentation to Select Senate Staff Members, 2 Mar 84, Rankine Notebooks, vol. 7, SDIO Historian.

⁴⁰ SCAS, Hearings: DoD Authorization for FY 1985, Pt. 6, 2928.

and that the question of SDI should be readdressed as part of "a much larger debate about the role of ABM defense as a complement to offensive nuclear systems."⁴¹

(U) Not only was Nunn skeptical of SDI on purely technical grounds; he also doubted whether a popular consensus could be sustained to support the program should the goal of population defense, as the President had originally set, be diluted or abandoned. "If the American people," he said, "believe they are supporting a program based on doing away with offensive weapons, which I think everybody has stipulated here will not happen . . . that is one thing. When they wake up and find out that is not what we are going to be doing--we will go for both offensive and defensive--they will have a change of heart."⁴²

(U) Nunn's concerns echoed through the hearings and received little effective rebuttal from administration witnesses. "I am getting long in the tooth," replied Richard DeLauer. "I can say within my lifetime I don't envision that nuclear weapons will be completely eliminated."⁴³ Such responses drew caustic remarks from Sen. Pete Wilson, who found them confusing and ultimately detrimental to the political future of the program. "I must tell you," Wilson said to DeLauer, "that I am mystified and, frankly, angry because your written testimony is at variance with, certainly the tone and, I think, even the substance of some of the responses you made." Still, despite his unease over the administration's presentation of its case, Wilson remained a strong supporter of SDI, even acknowledging that "we probably need to spend more on this program."⁴⁴

(U) The appearance by Abrahamson on April 24 did much to restore the administration's credibility, though it did not totally clear up the apparent discrepancies in previous testimony. In an effort to be reassuring, Abrahamson averred that the goals set for SDI were realistic and carefully considered. "We are frequently asked," he remarked,

⁴¹ *Ibid*, 2904.

⁴² *Ibid*, 2926.

⁴³ *Ibid*, 2925.

⁴⁴ *Ibid*, 2938, 2976.

whether the purpose of the Strategic Defense Initiative (SDI) is to defend people or military forces. Accomplishment of both missions is essential to the ultimate goal, which is to provide security for the people of the United States and our allies.

The immediate objective is to conduct research on those technologies which might enable the development of defensive systems capable of intercepting ballistic missiles after they have been launched and preventing them from hitting their targets. Once proven, these technologies could be used for the design and development of an appropriate system of defenses.⁴⁵

(U) Although most members of the committee found Abrahamson's remarks candid and reassuring, Sen. William S. Cohen of Maine, another Republican skeptic of the program, challenged the need for SDI. He wondered whether a resumption of progress in arms control might obviate the need for strategic defenses. "In other words," he said, "if we make progress . . . in reducing the numbers of ballistic missiles in our inventory and that of the Soviet Union, then embarking on so expensive a program would become unnecessary." Abrahamson, in reply, endeavored to put Cohen's question in its proper perspective. "I think, first of all," he said, "we do not to date have a very successful record in terms of achieving . . . reductions in offensive nuclear weapons."⁴⁶

(U) Despite the objections raised by Cohen, Sen. J. James Exon of Nebraska, a pro-defense Democrat who supported SDI, predicted that the committee would be "very receptive" to the program's needs. All the same, he confessed that he was uneasy over this "new, frightening concept," which he compared to the introduction of ICBMs in the 1950s. And he drew a clear distinction between supporting SDI as a research effort and endorsing the deployment of strategic defenses. "I hope we never have to deploy SDI," he said, "but we certainly have to plan for it." Should it come to that, he speculated, costs could soar to as high as \$100 billion or more over the next fifteen years, an estimate that Abrahamson did not challenge.⁴⁷

⁴⁵ *Ibid*, 3029.

⁴⁶ *Ibid*, 3037.

⁴⁷ *Ibid*, 3040.

(U) The most difficult questioning came from Sen. Carl Levin, perhaps the most ardent foe of SDI on the committee. What bothered Levin especially at this stage was whether the administration had already decided to proceed with deployment of space defenses should the research being done by SDIO prove in any way successful. When Abrahamson declined to offer what Levin considered a satisfactory answer, the two locked horns in the following exchange:

Senator LEVIN: In other words, we have not decided we would deploy this system even if the R&D is successful. Is that correct?

General ABRAHAMSON: That is correct.

Senator LEVIN: So, we are embarking on R&D of a \$25 billion magnitude without knowing that we would deploy the results even if we were successful. Is that correct?

General ABRAHAMSON: Yes sir.

Senator LEVIN: Do you know any other system where we are spending that much on R&D where we don't know if we would deploy it even if the R&D were successful? Can you give me any analogy to this?

General ABRAHAMSON: No, sir, I cannot, but I don't know any other system that has the hope of this particular system either.⁴⁸

(U) To balance the testimony, the committee also heard from two critics of SDI--Richard Garwin, who had previously testified before the House Armed Services Committee; and Gerard Smith, who as head of the U.S. SALT I delegation had overseen the negotiation of the 1972 ABM Treaty. Smith acknowledged that he could not comment on the technical aspects of SDI, but for political reasons he was adamantly against the program, contending that it would jeopardize the treaty and thereby undermine the entire arms control process. "The ABM Treaty," he said, "which is the keystone of the arms control regime, cannot long survive if the SDI goes forward. This treaty was based on a common superpower recognition that mounting defenses against ballistic missiles would accelerate the offensive arms race, create a second race for defensive superiority and

⁴⁸ *Ibid*, 3044.

destabilize the existing strategic balance."⁴⁹ It was an argument the senators had heard before and one they would take into account while marking up the authorization bill.

(U) Like the House, the Senate Armed Services Committee, citing reasons of budgetary constraint, trimmed the authorization for SDI, but only by \$150 million to be distributed throughout the program at the discretion of the SDIO director. A motion to reduce the program by an additional \$200 million fell short by a vote of 7-11, with Sen. Jeff Bingaman (D., N.M.) joining all ten Republicans in voting "nay."⁵⁰ Any further cuts, the majority believed, would have the effect of curtailing programs like laser research that had enjoyed substantial congressional support in previous years. The committee also commended the President for his vision to seek "an alternative to our current sole reliance on offensive retaliation to deter Soviet attack." And it declared an aggressive research effort in this regard "both prudent and necessary" in view of continuing Soviet work on missile defenses. But it was disappointed by what it termed the lack of "precise focus and goals" for SDI. "A clearer articulation of the goals, and assessments of the many faceted implications of the program, including its implications for arms control, will be essential if the committee is to support the substantial funding increases proposed beyond fiscal year 1985." In an effort to blunt criticism of the program, the committee included in its report a proviso--already a staple of administration policy--that any work done on SDI be in compliance with the ABM Treaty, though how the treaty should be interpreted in this regard, the report did not mention.⁵¹

(U) Appended to the committee's report were several dissenting views with respect to SDI, a development that signaled an impending floor fight. Despite having voted with his Republican colleagues to protect funding for research, Sen. Cohen reserved final judgment on SDI as a whole until, as he put it, "Congress is provided with a coherent plan for the program." At the same time, three prominent liberal Democrats--Hart, Levin, and Kennedy--attacked the program on a broad front. Citing what he termed the inability of the administration "to explain satisfactorily" the aims

⁴⁹ *Ibid*, 3058.

⁵⁰ Congressional Quarterly Weekly Report, June 9, 1984: 1357.

⁵¹ S. Rpt. No. 98-500, pp. 172-174.

of SDI, Hart--a candidate for his party's presidential nomination--deplored the committee's reluctance "to take any significant actions" to curtail SDI funding. Levin was likewise critical of what he called SDI's "excessive research budget." And Kennedy, focusing on the strategic implications of SDI, denounced the program as "a certain prescription for an arms race in outer space" and "plainly inconsistent with the ABM Treaty." "This is not a 'vision,'" complained Kennedy, "it is a mirage."⁵² Thus, with opinions sharply divided, it was hardly surprising that SDI would face its first serious test on the Senate floor.

Senate Debate: The Percy Amendment

(U) In contrast to the House, which paid little attention to SDI when the defense authorization bill came up, the Senate chose to debate the matter at some length. The leader of the opposition to SDI was Sen. Charles H. Percy of Illinois, chairman of the Senate Foreign Relations Committee. A moderate in a party with an increasingly conservative cast, Percy was often at odds with the Reagan administration on a variety of foreign and defense policy issues, particularly arms control. Convinced that SDI would delay resumption of the stalled arms talks in Geneva, Percy had planned to offer an amendment cutting the SDI authorization by an additional \$257 million, thus bringing it down to the figure passed by the House of \$1.37 billion.⁵³ But when Senators Nunn and Cohen objected, Percy offered instead an amendment trimming only \$100 million, in effect reducing the program to approximately the same level of funding for SDI-type technologies as projected by the Pentagon prior to the President's March 23, 1983, speech. A more ambitious effort with bipartisan overtones, co-sponsored by Senators William Proxmire (D., Wis.) and Charles Mathias (R., Md.), would have reduced the program by \$510 million from the committee's figure but was dropped when support failed to materialize.⁵⁴

⁵² *Ibid.*, 513, 518, 521, 523-524.

⁵³ U.S. Congress, Senate, Committee on Foreign Relations, Hearings: Arms Control Overview, 98:2 (Washington, D.C.: G.P.O., 1984), 52.

⁵⁴ Congressional Quarterly Weekly Report, June 16, 1984: 1420, 1422.

(U) In introducing his amendment, Percy stressed that it was not his purpose to "kill" SDI but rather "to ensure that SDI is approached with a prudent degree of caution." Arguing that the program's goals were either poorly defined or being concealed from Congress, Percy urged his colleagues not to be deceived by what he termed "an all-out crash program intended to lead to deployment of hardware within the next decade." In an apparent effort to attract supporters, Percy defended his motion as a "deficit-reduction amendment," not as a referendum on SDI. But it was clear that, by exploiting concerns over the cost of the program, he hoped also to undermine confidence in it. "None of this money, not a penny," he insisted, "will buy a single missile, gun, tank or submarine. . . . Rather, we are being asked to spend \$26 billion on a research project--an exploratory study if you will."⁵⁵

(U) Speaking on behalf of the amendment, Proxmire, whose opposition to strategic defenses went back to the 1969 ABM debate, attacked the whole concept of SDI, labeling it a dubious technology that could end up bankrupting the country. "Any voter," he said, "who, in 1984 or any subsequent year, wants to measure the fiscal responsibility or lack of it of his Senator will simply have to look at his vote on Star Wars--the big spending issue of 1984 and the future."⁵⁶ But Sen. John Tower (R., Tx.), chairman of the Armed Services Committee, disagreed, reminding his colleagues that SDI was a research program and that Congress had traditionally looked with favor on research.⁵⁷ Others, including Goldwater, Warner, and conservative Republican Dan Quayle of Indiana, also spoke against the amendment, but the final vote of 47 to 45, drawn mainly along party lines, killing the amendment, suggested that SDI was already a divisive and controversial issue, with a narrow margin of support in the Senate. Indeed, the vote might have been closer, or even gone the other way, had not three opponents of SDI--Kennedy, Tsongas, and Dale Bumpers (D., Ark.)--been out of town attending a farewell dinner for Tsongas, who was retiring from the Senate at the end of

⁵⁵ Congressional Record, June 13, 1984: S 7120-7122.

⁵⁶ *Ibid*, S 7122.

⁵⁷ *Ibid*, S 7124.

the year.⁵⁸ As finally approved in September by the conference committee, the Senate-recommended figure of \$1.627 billion for SDI prevailed as the authorized sum.⁵⁹

(U) Less controversial than its funding provisions were two other Senate-sponsored additions to the authorization bill, both designed to give Congress more influence over SDI and a clearer idea of where the program was headed. One amendment, introduced by Sen. Larry Pressler (R., S. Dak.), required the Defense Department to provide Congress with annual reports detailing the objectives and expected costs of SDI. The other measure, sponsored by Proxmire, did little more than reiterate what was already administration policy. It expressed the sense of Congress that "the President shall inform and make every effort to consult with" NATO countries, Japan, and other American allies (i.e., Israel) concerning SDI research.⁶⁰ Arguing in a New York Times op-ed piece that West Europeans' reaction to SDI had been "polite but negative," Proxmire feared that they and the Japanese would feel denied the protection of the U.S. nuclear deterrent and that they might be tempted to "seek separate accommodations with the Soviet Union to salvage their national security." "The last thing we want to do," Proxmire insisted, leaving the vague (and erroneous) impression that he supported SDI, "is build a 'Star Wars' wall around us that leaves the world outside crumbling."⁶¹ Not a particularly unusual or objectionable idea, Proxmire's motion won passage without debate.⁶²

⁵⁸ Congressional Quarterly Weekly Report, June 16, 1984: 1422.

⁵⁹ H. Rpt. No. 98-1080, p. 254, 264.

⁶⁰ Larry Pressler, Star Wars: The Strategic Defense Initiative Debates in Congress (N.Y.: Praeger, 1986), 70.

⁶¹ William Proxmire, "'Star Wars' Protection, But Not for Europeans," New York Times, July 23, 1984, op-ed page.

⁶² Pressler, Star Wars, 70-71.

Appropriations

(U) The success the administration had in fending off deep cuts for SDI in the 1985 defense authorization did not carry over to the appropriations process, due largely to mounting skepticism of SDI in the House. With all of its members up for reelection, the House was extremely sensitive to the implications of large new spending programs, especially ones with strong political overtones like SDI. Anticipating trouble, Secretary of Defense Weinberger met with President Reagan in late March 1984 and apparently warned that, as the SDI funding request went forward, Congress could be expected to support the program in theory during markup of the authorization bill but then balk at actually providing the full amount in the President's budget request. According to a briefing paper that Weinberger took with him to the meeting, the biggest hurdle would come in the House Appropriations Committee, which was likely to impose cuts that could force a choice of emphasis between keeping key demonstrations on schedule or vigorously pursuing technology development for longer term needs. In short, senior administration officials worried from the outset that SDI would be crippled before it got started, starved for sufficient funding for the dynamic start that Reagan wanted.⁶³

(U) As it happened, the administration had just cause for concern as the appropriations bill moved through the House. Following its customary procedure, the Appropriations Committee conducted its own separate inquiry into SDI, thus producing a considerable amount of redundant testimony. During hearings in May, the chairman of the Defense Appropriations Subcommittee, Rep. Joseph P. Addabbo (D., N.Y.), insisted on questioning not only administration spokesmen and other proponents of strategic defenses like High Frontier, but also critics of the program such as Peter A. Clausen, senior arms analyst for the Union of Concerned Scientists.⁶⁴ Among the subcommittee's members were several--Democrats Les AuCoin of Oregon and Norman D. Dicks of

⁶³ Memo for SecDef, [Mar. 19, 1984], sub: SDI--Information Memo, enclosing "Status of SDI," summarizing talking points for SecDef's meeting with the President, Rankine Notebooks, vol. 7, SDIO Historian.

⁶⁴ See U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1985, 98:2 (Washington, D.C.: G.P.O., 1984), Part 5.

Washington, in particular---whose skepticism of SDI was already well established. In fact, neither the Defense Appropriations Subcommittee nor its parent body had many members who were staunchly behind SDI at this time. About the strongest supporter of SDI on the subcommittee was Rep. William Chappell, a Democrat from Florida, though in deference to party unity he generally voted with the majority.⁶⁵ The results could have been predicted.

(U) Feeling that they were on friendly territory, an anti-SDI alliance of the Union of Concerned Scientists and several arms control lobbying groups launched an effort over the summer of 1984 to persuade the committee to confine any increase for strategic defense research to the same five percent that the administration had requested for its military budget as a whole. This would have meant a reduction of at least \$270 million from the pending House authorization target figure of \$1.370 billion. In fact, just prior to the August recess, in the first vote taken in the House specifically on SDI, the committee voted 24-21 to cut the program's 1985 appropriation to \$1.09 billion.⁶⁶ Siding with the lobbyists, the committee roundly condemned the President's original SDI budget request of \$1.777 billion (a 79 percent increase) as excessive and potentially wasteful. "Often in the past," the panel pointed out, "sudden large increases in funding have led to less than efficient use of those funds." A less drastic increase over the previous year's funding, the committee believed, "will allow needed research to continue, while avoiding a commitment to too expensive a program until Congress and the Nation can carefully examine the alternatives." But in looking ahead, the committee was little encouraged. "Given the nation's financial problems," it said, "the prospect of spending \$25 billion or more over the next five years to learn whether SDI is even feasible is a troubling one."⁶⁷

(U) In the Senate, the defense appropriations subcommittee, chaired by Senator Ted Stevens (R., Alaska), proved considerably more supportive of SDI, recommending full appropriation of the Senate-authorized sum of \$1.627 billion. But in deference to the general cost-cutting mood on

⁶⁵ Author's interview with LTC Gordon Tillery, SDIO Legislative Liaison, Washington, D.C., Nov. 29, 1989.

⁶⁶ Congressional Quarterly Weekly Report, Sept. 29, 1984: 2362.

⁶⁷ H. Rpt. No. 98-1086, p. 248.

Capitol Hill associated with growing budget deficits and the upcoming November elections, the committee concurred that a general reduction of \$150 million from the administration's \$1.777 billion request, as mandated in the Senate authorization, should be upheld. "Any further reduction below that level," the panel insisted, "would disrupt the President's effort to expand SDI research." In elaborating on how it had reached this decision, the committee affirmed the belief of most of its members that "a vigorous research and technology demonstration effort in the area of strategic defense is a high national security requirement." And it commended the administration, presumably with an eye to the projections in the Fletcher report, for beginning to look at "a transition phase which would provide for a possible incremental, sequential deployment of a strategic defense system." But, it added: "The Committee's support for SDI does not imply that it is ready at this time to endorse either full-scale development or deployment of an SDI system."⁶⁸

(U) Because of extended wrangling over the MX missile in the authorization law it was not until late September that Congress was able to turn its attention to the defense appropriations bill. With a new fiscal year about to begin, Congress had to scramble to keep government money flowing. On September 28, as the Senate was preparing to take up a continuing resolution, Sen. Bumpers, one of SDI's harshest critics, served notice that he would offer an amendment stripping \$140 million from SDI and using the money instead to bolster conventional forces. Labeling SDI "a step in the wrong direction," Bumpers maintained that it would lead to "an unbelievable escalation of the arms race" and eventual abrogation of the ABM Treaty. But citing the larger reductions pending before the House, Bumpers shortly reversed himself and announced that he had decided to shelve his amendment.⁶⁹

(U) To simplify the transition from one fiscal year to the next, the Senate incorporated the recommendations of its Appropriations Committee's report, including those with respect to SDI, into the continuing resolution. The House, facing the same problem, did likewise with its Appropriations Committee report, with the result that the final deliberations on SDI funding were

⁶⁸ S. Rpt. No. 98-636, pp. 201-203.

⁶⁹ Congressional Record, Sep. 28, 1984, p. S 12277; Oct. 3, 1984, p. S 12846.

taken in the conference committee. Here, the problem became one of reconciling House and Senate differences amounting to over \$500 million in funding. The resulting compromise, as such solutions tend to be, effectively split the difference, giving the program \$1.4 billion--more than the House as a whole preferred but still considerably less than the Senate had voted.⁷⁰

(U) All the same, as the debate over both the 1985 authorization and spending bills indicated, SDI was off to a politically shaky start. Though the amount finally approved was well above the previous year's level of spending, it was more than 20 percent below the President's request in line with the projected goals of the Fletcher report. Of even more critical importance to the program's future, the debate in Congress had uncovered significant opposition to SDI in the House, balanced against broad, but not necessarily deep, support in the Senate. In both cases, the splits tended to follow party lines, though Republican endorsement was less than unanimous. That Congress would continue to take a critical look at SDI, possibly even freezing or cutting money in order to help hold down the military budget, was the prediction made by Chairman Addabbo in a year-end interview with the New York Times.⁷¹ Though the results would not be as dire as Addabbo predicted, it was clear that SDI would not have an easy future.

⁷⁰ "Conferees Agree on Spending Bill, Ending Deadlock," New York Times, Oct. 11, 1984: A1, A20.

⁷¹ Bill Keller, "Space Weapons Project Faces Fight in Congress," New York Times, Dec. 14, 1984.

Figure III-3

Summary of Congressional Action on
the FY 1985 SDI Budget
(\$ in millions)

President Requested	\$1,777
House-passed Authorization	1,370
Senate-passed Authorization	1,627
Congress Authorized	1,627
House-passed Appropriation	1,090
Senate-passed Appropriation	1,627
Congress Appropriated	\$1,400

Note: These figures do not include appropriations made separately for SDI-related research done by the Department of Energy.

Source: H. Rpt. No. 98-1080, p. 254; and H. Rpt. No. 98-1159, p. 378.

Other Congressional Actions

(U) Although budget deliberations topped the congressional agenda insofar as SDI was concerned, the second session of the 98th Congress witnessed a number of other significant actions bearing on the program. These ranged from individual initiatives designed to mobilize opinion and support for or against SDI, all the way to full-scale investigations with public hearings conducted by the House Foreign Affairs and the Senate Foreign Relations Committees.

(U) The most active individuals initially were the critics, especially people like Proxmire and Bumpers in the Senate, and Representatives Thomas Downey (D., N.Y.) and George E. Brown, Jr., (D., Calif.) in the House, all of whom made extensive use of the Senate and House floors to attack SDI and to insert anti-SDI articles into the official record.⁷² Following passage of the defense appropriations bill, Proxmire also requested the General Accounting Office (GAO) to initiate a review of how SDIO was using its funds, an inquiry said to reflect the senator's view that SDIO could not efficiently and effectively expend the money it would have on hand.⁷³ Earlier, in an effort to develop a more concerted opposition, Rep. Brown had announced on March 28, 1984, that he was helping to form a congressional group calling itself the Coalition for the Peaceful Uses of Space to lobby against antisatellite weapons and SDI.⁷⁴ The purpose of forming the coalition, Brown explained, was

⁷² For a sampling, see Congressional Record, Apr. 26, 1984, p. H 3072 and S 4879-4880; June 20, 1984, p. S 7666-7668; June 26, 1984, p. S 8195-8196; Oct. 3, 1984, p. S 12846-12852.

⁷³ Ltr, Harry R. Finley, Assoc. Dir.-in-Charge, GAO, to Weinberger, Oct. 29, 1984; Memo, Col. Robert W. Parker, USA, Dir., Resource Management SDIO, for Director, Joint Staff, et.al., Dec. 5, 1984, sub: GAO Review of SDI Program, both in Directorate of Technology files, SDIO.

⁷⁴ "Congressmen and Activists Ask a Halt to Space Testing," New York Times, Mar. 29, 1984: A20.

to send a message to the president, to the Congress and to the public that "Star Wars" should stay in the movie theaters, and out of the White House. The public is being presented with the dangerous illusion that the escalation of the arms race into space can solve our problems on earth. However, a careful analysis of Star Wars technologies reveals that these exotic space weapons are vulnerable, unpredictable, fantastically expensive, and will decrease our national security.⁷⁵

Among its supporters the coalition claimed a bipartisan group of eleven House members (nine Democrats and two Republicans), former arms control negotiator Gerard Smith, Drs. Richard Garwin and Herbert Scoville, the latter a former deputy director of the CIA, and a lengthy list of well-known and not-so-well-known public interest groups, including the League of Women Voters, the Union of Concerned Scientists, the Federation of American Scientists, the Arms Control Association, Physicians for Social Responsibility, the Committee for National Security, the Institute for Security and Cooperation in Outer Space, Environmental Action, and the Friends Committee on National Legislation.⁷⁶ Curiously, Brown later said that he had no recollection of helping to form this coalition, implying that it was an election-year stunt, and that his real concern over SDI was its ASAT potential which, as a strong and longtime believer in the peaceful uses of outer space, he thoroughly deplored.⁷⁷

(U) Proponents of SDI, while less well organized, countered with promotional efforts of their own, including speeches and insertions of articles praising the merits of SDI. Among the more active supporters were Sen. Orrin G. Hatch (R., Utah), a leading figure among Capitol Hill conservatives, and Rep. Marilyn Lloyd (D., Tenn.).⁷⁸ In March 1984 Hatch also signed, along with five other conservative Republican senators--Jake Garn of Utah, Jesse Helms of North Carolina, Robert W. Kasten of Wisconsin, and James A. McClure and Steven D. Symms, both from Idaho--a

⁷⁵ Press release quoted in Thomas Lydon, Space-Based Defense Systems Market Study and Forecast (Greenwich, CT.: Defense Marketing Services, 1984), 105.

⁷⁶ *Ibid*, 106.

⁷⁷ Author's interview with Rep. George E. Brown, Jr., Mar. 12, 1990, Washington, D.C.

⁷⁸ Sweedler, "Congress and SDI," 61.

letter to Secretary of Defense Weinberger expressing their concern over the possible need of a stepped-up strategic defense program in order to counter what they deemed to be Soviet infringements of the unratified SALT II Treaty. In the senators' view, the United States "may need to consider accelerating the initial operational schedule for a space-based layered anti-ballistic missile defense" and take additional "quick-fix" steps to bolster U.S. offensive capabilities in the face of apparent Soviet violations of arms control agreements.⁷⁹ Surprisingly reticent, considering his previous efforts on behalf of space-based strategic defenses, was Sen. Malcolm Wallop, who made no overt attempt to influence the debate, though he did repeatedly indicate his continuing interest in the matter.⁸⁰

(U) Exactly what the critics found objectionable about SDI depended largely on their personal preferences and what they perceived to be the priorities of their constituents. The most often mentioned criticism was the program's cost, not only during the research phase as outlined in the Fletcher report, but as a possible option for future deployment. Among Democrats, especially liberals and those representing declining urban centers or populations dependent on federal entitlement programs, there was a tendency to regard SDI as a menacing competitor for increasingly scarce resources due to the Reagan administration's reordering of social spending priorities. By limiting funding during the research phase, they apparently saw an opportunity to slow the program to the point that any decision on deployment would be delayed indefinitely, thereby curbing the chance that SDI might establish a rival claim on the budget.

(U) A further source of criticism concerned SDI's impact on the international environment, especially arms control negotiations and continuing East-West tensions. Although these subjects had come up often during the budget hearings, they received closer attention during parallel investigations in 1984 by the House Foreign Affairs Committee and the Senate Foreign Relations Committee.

⁷⁹ Lydon, Space-Based Defense Systems, 78-79.

⁸⁰ See for example Memo, BG Robert R. Rankine, Jr., USAF, for DeLauer, Mar. 2, 1984, sub: Sen. Wallop's Interest in SDI Program Manager, Rankine Notebooks vol. 7, SDIO Historian; and handwritten notes by LTC Jon Anderson on mtg with Angelo Codevilla, Dec. 12, 1984, SDIO External Affairs, Congressional Correspondence file.

(U) The Foreign Affairs Committee's inquiry, conducted as part of its ongoing investigation into the role of arms control in U.S. defense policy, revealed even further the deepening divisions over SDI in the House. During a series of hearings that summer majority committee members repeatedly voiced their dismay over the President's decision to pursue a high-profile missile defense program and not to emphasize arms control instead. In the view of Rep. Tom Lantos (D., Calif.), bipartisan consensus on these issues "is totally lacking." Rep. Stephen J. Solarz (D., N.Y.) worried about the potential impact of SDI on the 1972 ABM Treaty, while Rep. Edward J. Markey (D., Mass.), appearing as a witness, expressed absolute certainty that the development of "antiballistic missiles threatens to undermine important existing arms control agreements such as the ABM Treaty." On the other hand, Rep. Larry Winn (R., Kan.) thought that SDI was an important step toward maintaining the U.S. lead in space technology. "I think we're ahead of [the Soviets] in space," he said, "and I want to stay that way." But Rep. Jim Courter (R., N.J.), one of the strongest proponents of SDI in the House, disagreed. He felt that the constraints imposed on the United States because of the ABM Treaty had given the Soviets a potential edge in space and missile defense, an edge that did not necessarily justify continued U.S. adherence to the treaty. In fact, as far as Courter was concerned, ". . . we should pay particular attention to studying Soviet advances in ballistic missile defense and the wisdom of maintaining the Anti-Ballistic Missile Treaty of 1972 as an element of U.S. security."⁸¹

(U) Despite the concern of Courter and several of his colleagues over Soviet advances in ballistic missile defenses, it was Abrahamson's impression that few in Congress ever considered this a major worry, let alone the justification for a large new program.⁸² During their own review of the arms control and space-based weapons situation, members of the Senate Foreign Relations Committee virtually ignored warnings by Abrahamson and other administration witnesses of "massive Soviet investments and programs" in ballistic missile defenses, preferring to concentrate instead on SDI's impact on East-West relations and the possibility that it might ignite an expensive,

⁸¹ U.S. Congress, House, Committee on Foreign Affairs, Hearings: The Role of Arms Control in U.S. Defense Policy, 98:2 (Washington, D.C.: G.P.O., 1984), 17, 52, 65, 188, 195.

⁸² Author's telephone interview with Lt. Gen. James A. Abrahamson, June 30, 1991.

destabilizing arms race in space. In the view of Sen. Alan Cranston (D., Calif.), an inveterate critic of Reagan administration policies, SDI was another manifestation of the President's penchant to "build and build until the Soviets cry uncle." "We have only an arms race," argued Cranston, "spiraling out of control and into space with ever more costly, ever more destabilizing, ever less verifiable nuclear weapons." Even Sen. John Heinz (R., Pa.), usually a Reagan administration supporter, thought that SDI added to the growing "confrontational political climate" between Washington and Moscow. "We could," he worried, should SDI go forward, "be a lot closer to a new and destabilizing arms race."⁸³

(U) Other committee members attacked the practicability of SDI, echoing sentiments heard elsewhere about the fiscal burdens the program would impose. Sen. John Glenn (D., Ohio), the first American astronaut to orbit the earth in space and usually a proponent of strong defenses, characterized the whole idea of SDI as "foolish" and "something that has not yet been invented" entailing the allocation of "sums that are unbelievable." Sen. Paul Tsongas saw the costs somewhat differently. "It seems to me," he observed, "that the threat of this system is not only in arms control, it is a threat in terms of taking engineers and capital away from other things that we need to be competitive internationally." The solution, in Sen. Larry Pressler's view, was to put a brake on the whole enterprise before it got further along. "If we do not stop it this year or next year," he said, "it will be impossible to halt, the floodgates will be opened, and we will go on to the next level . . . which will be in my view a very expensive one."⁸⁴ No one in Congress was as yet openly suggesting that SDI be used as a bargaining chip should arms control talks resume, but the idea was beginning to germinate anyway, often as an appealing alternative to the more expensive obligations that SDI might eventually impose.

⁸³ SCFR, Arms Control Overview, 5, 71.

⁸⁴ U.S. Congress, Senate, Committee on Foreign Relations, Hearings: Strategic Defense and Anti-Satellite Weapons, 98:2 (Washington, D.C.: G.P.O., 1984), 74, 77, 185, 216.

SDI and the 1984 Elections

(U) While not a critical factor in the 1984 elections, SDI nonetheless played a role, mainly in the race for the presidency. As a candidate for the Democratic nomination and, later, as Ronald Reagan's principal challenger for the presidency, Walter F. Mondale, a former senator from Minnesota and Jimmy Carter's vice president, sought to portray SDI as a symbol of the Reagan administration's obsession with costly and questionable defense programs at the expense of domestic needs. In a speech during the primary campaign in Cleveland, Mondale labeled SDI "dangerously destabilizing" and proposed that, if nominated and elected, he would seek agreement with the Soviets banning all weapons from outer space. "I can think of only one reason to support Star Wars," Mondale said. "Fairy tales are often more appealing than reality."⁸⁵ Subsequently, during the fall campaign, he termed the entire concept of space-based ballistic missile defenses an unworkable "hoax," a theme that his vice presidential running mate, Geraldine A. Ferraro, also took up.⁸⁶

(U) To fend off Mondale's attacks on SDI, Reagan revived the message in his speech of March 23, 1983, offering the hope that research in space-based defenses would someday produce an alternative to nuclear deterrence based on the threat of mutual assured destruction. And during a nationally televised debate, he again suggested, repeating what he had said the year before, that it would be in the best interests of the United States to consider sharing defensive technologies with the Soviets should SDI prove successful. Dismissing such a offer as a "nonstarter," Mondale reiterated his commitment to negotiations to "keep the heavens free of war."⁸⁷ But if opinion polls were any gauge of popular sentiment, it was Reagan's position that continued to carry the most appeal, an assessment that seems to have been confirmed subsequently by the overwhelming margin

⁸⁵ "Mondale Asks Ban on Arms in Space," New York Times, Apr. 25, 1984, p. A1, A18.

⁸⁶ "Mondale Portrays as 'Hoax' Reagan's Space-Arms Plan," *ibid*, Oct. 15, 1984, p. B4. Also see "CIA Primer Is 'in Spirit of Stalin,' Ferraro Says," *ibid*, Oct. 21, 1984, p. 29.

⁸⁷ Text of Reagan-Mondale Debate in Kansas City, Mo., Oct. 21, 1984, Congressional Quarterly Weekly Report, Oct. 27, 1984, pp. 2834-2835. For a summary of the debate, see New York Times, Oct. 22, 1984.

of his reelection.⁸⁸ Afterward, in an interview with the Washington Post, Reagan expressed his unrelenting commitment to SDI, terming it also an incentive for the Soviets to resume arms controls talks aimed at reducing or eliminating offensive ballistic missiles.⁸⁹

(U) Despite the attention it received at the national level during the election campaign, SDI seems to have played little or no part in any of the House or Senate races. All the same, the results were bound to affect the program. Although the Republicans lost two seats in the Senate, they retained their overall majority, thus assuring that SDI would continue to enjoy a core of more or less solid support in the upper chamber. However, in the House the Democrats suffered only modest losses that in no way jeopardized their control. (In fact, throughout the 1980s, the turnover in the House of Representatives was almost the same as in Britain's House of Lords, where death is the only form of defeat--7 percent in the House of Representatives versus 5 percent in the House of Lords.⁹⁰) Even though the Republicans picked up 14 House seats, most were from conservative southern districts, so that in the last analysis the ideological make-up of the House was scarcely affected.⁹¹ In other words, opposition to SDI, especially from House liberals, was likely to dog the program for at least the next two years.

(U) In sum, not much changed as a result of the 1984 elections. Ronald Reagan kept control of the White House with a landslide victory, the Democrats kept control of the House, and the Republicans kept control of the Senate. On the one hand, it was possible to interpret the outcome as a resounding popular endorsement of Reagan's leadership; on the other, it was merely the voters' reaffirmation of the status quo. What was certain, though, was that with Reagan's reelection SDI was virtually assured high-level backing through the remainder of the five-year research period envisioned in the Fletcher report. And with Congress sharply divided politically, SDI would continue to be a source of controversy as well.

⁸⁸ Payne, Strategic Defense, 234-247.

⁸⁹ Washington Post, Nov. 7, 1984, pp. A1, A38.

⁹⁰ The Economist, Nov. 18, 1989, p. 25.

⁹¹ See "G.O.P. Adds to Total in House, but Democrats Retain Control," New York Times, Nov. 8, 1984.

CHAPTER IV

PROGRESS AND CONTROVERSY (1985)

(U) By the beginning of 1985--nearly two years after President Reagan had issued his challenge that produced the Strategic Defense Initiative--it was clear that SDI was increasingly a source of partisan and ideological controversy on Capitol Hill. Not only was the technical feasibility of the program still a hotly contested issue, but also there were new concerns being voiced by members of Congress about SDI's impact on the prospects for arms control, on the continuing viability of the ABM Treaty, and on the overall strategic balance. Even though the opposition may have been in no immediate position to kill the program outright, it had sufficient strength, as demonstrated during the 1984 funding debate, to impose significant curbs on the program and to limit its scope and growth. That opponents would try again in 1985 to impose substantial restraints left the administration no choice but to prepare itself for an uphill legislative battle.

The Ninety-ninth Congress

(U) The make-up of the Ninety-ninth Congress, which convened in January 1985, was little different from the year before. As a result of the November 1984 elections, the Democrats retained a healthy majority in the House (253 to 182) while the Republicans, with a slightly diminished majority (53 to 47), kept control of the Senate. Of the two Republican senators who failed in their bids for reelection, one was Charles Percy of Illinois, chairman of the Foreign Relations Committee, who had not been one of the administration's stronger backers, either on defense policy in general or on SDI in particular. Indeed, it was Percy who in 1984 had sponsored an amendment to the defense authorization bill attempting to cut the SDI budget by \$100 million (see Chapter III). With Percy gone, the chairmanship of the Foreign Relations Committee passed to Sen. Richard Lugar of Indiana, whose views were generally more in line with those of the administration.

(U) Two other changes in committee leadership would also affect the future of SDI. As chairman of the Senate Armed Services Committee, Barry M. Goldwater replaced John Tower, who had decided not to stand for reelection to the Senate. A leading conservative, Goldwater also had a reputation as an independent thinker, even though he usually supported the administration's position on defense policy. Thus, even though Goldwater was personally skeptical of the military value of strategic defenses, preferring instead a defense posture resting on offensive weapons and the threat of mutual assured destruction, he loyally backed the President's SDI. Determined to retire from politics when his term would be up in 1987, Goldwater's first concern as chairman was the defense reorganization bill that became the 1986 Goldwater-Nichols amendments to the National Security Act. Indicative perhaps of the priority and importance he attached to SDI is the total omission of any mention of the program in his memoirs.¹

(U) The other change was in the House, where the Democratic Caucus voted to replace Melvin Price of Illinois with Les Aspin of Wisconsin as chairman of the Armed Services Committee. Although Aspin was only sixth in seniority on the committee, he seemed more attuned to the desires of liberal Democrats in the House than Price had been. By leading the revolt that ousted him, the younger, more liberal members of the caucus were saying, in effect, that they wanted the committee to be less conservative and more responsive to Democratic sentiments in the House as a whole. At age 80 and reportedly in frail health, Price was a vulnerable target; but in deference to his past service, the revolt stopped short of stripping him of his chairmanship of the research and development subcommittee, which had immediate jurisdiction over SDI.²

(U) Though it did not necessarily signal a radical shift in the committee's preferences, Aspin's appointment nonetheless spelled trouble for SDI. A staff economist to Secretary of Defense Robert McNamara in the 1960s, Aspin had come to Congress in 1971 and had quickly established himself as a hard-driving, seemingly knowledgeable Pentagon critic. Interviewed on NBC's "Meet the Press,"

¹ See Barry M. Goldwater with Jack Casserly, Goldwater (New York: Doubleday, 1988).

² See "House Seniority System Jolted: Price Dumped, Aspin Elected," Congressional Quarterly Weekly Report, Jan. 5, 1985: 5-7.

Aspin described himself as an "aggressive moderate."³ "His goal," according to one observer, "is to try to fashion a package of issues that provides both conservative and liberal Democrats with some victories, positioning himself in the middle as mediator and creator."⁴ In practical terms, this meant supporting some administration programs that most Democrats had traditionally opposed, such as the MX missile and chemical weapons, while challenging others, including SDI. Indicative of the approach he would take toward SDI was a speech Aspin gave to the Carnegie Endowment for International Peace in Washington a few days after being elected committee chairman. Among the points he made, Aspin expressed skepticism of SDI and thought the administration had to do a better job of clarifying the program's goals before he would consider giving it additional support.⁵

Background of the 1985 Budget Debate

(U) The President's budget for the 1986 fiscal year, forwarded to Congress on February 4, 1985, requested appropriations for the Department of Defense of \$313 billion, a record total meant to continue the military buildup, especially in strategic weapons systems, that had become one of the hallmarks of Reagan's presidency.⁶ Of this amount the President requested just over \$3.7 billion for the Strategic Defense Initiative Organization (see Figure IV-1), more than a 160 percent increase from the previous year's appropriation, representing about 1.2 percent of the DoD total.⁷ In partial compliance with the congressional mandate handed down in 1984 to provide a year-by-year breakdown of "long-term costs" for strategic defenses, SDIO estimated that its budget would rise by

³ Notes from Interview with Rep. Les Aspin on NBC's "Meet the Press," Mar. 17, 1985, SDIO External Affairs Records, Congressional Correspondence file.

⁴ John Isaacs, "Will Aspin sink or swim?" Bulletin of the Atomic Scientists, (Nov. 1985): 8-9.

⁵ Congressional Quarterly Weekly Report, Jan. 19, 1985: 100-101.

⁶ U.S. Office of Management and Budget, Budget of the United States: Fiscal Year 1986 (Washington, D.C.: G.P.O., 1985), p. 2-4.

⁷ U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1986, Part 7, Strategic and Theater Nuclear Forces, 99:1 (Washington, D.C.: G.P.O., 1985), 3975.

FIGURE IV-1
BREAKDOWN OF SDIO BUDGET REQUEST
FOR FY 1986
(\$ in millions)

Program Element	FY85 Approp	FY86 Request
SATKA	\$ 546	\$1,386
DEW	376	966
KEW	256	860
SC/BM/C3	99	243
SLKT	112	258
Program Management	11	9
TOTALS	\$1,400	\$3,722

Source: U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1986, 99:1 (Washington, D.C.: G.P.O., 1985), 3975.

33 percent, to \$4.9 billion in FY 1987. But beyond this the organization refused to speculate, arguing that future budgets could not be accurately estimated in the absence of further research and decisions on such matters as engineering development and deployment.⁸

(U) Congress immediately realized that this SDI budget, unlike its predecessor, had major, long-term implications. Not only would such a large increase turn SDI into the biggest and fastest growing program in the military R&D budget, but also it would transform SDI into a clear competitor for resources with other government-sponsored activities, military and civilian alike. In fact, SDI already accounted for 4.4 percent of the Defense Department's R&D budget and would under the administration's request consume 9.4 percent.⁹ The result in all probability, should this trend continue, would be to establish SDI and the organization behind it as permanent fixtures of the Federal budget, an unwelcome prospect as far as the program's harsher critics were concerned.

(U) Once again the administration mounted a strong, well coordinated effort to secure authorization and appropriation of the funds it had requested for SDI. But this time, unlike the year before, opponents of SDI--both in Congress and among the public at large--were better organized and better informed, ready not only with rhetorical rebuttal but also with statistical data and alternatives to the administration's proposals. In an effort to maximize their effectiveness, the two main scientific groups opposed to SDI--the Federation of American Scientists and the Union of Concerned Scientists--decided to join forces in order to put more concerted pressure on Congress through a letter writing campaign and other lobbying techniques.¹⁰ As a result, the administration found itself more on the defensive than it had probably expected and forced in some instances to parry attacks from unexpected sources.

(U) Although the \$3.7 billion request for FY 1986 was consistent with administration forecasts (see Chapter III), it was the percentage size of the increase, compared with what Congress

⁸ U.S. Dept. of Defense, Report to the Congress on the Strategic Defense Initiative, 1985 (March 1985), C-24-25.(U)

⁹ U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1986, Part 2, 99:1 (Washington, D.C.: G.P.O., 1986), 2.

¹⁰ "Critics Take Aim at Reagan Anti-Missile Plan," Congressional Quarterly Weekly Report, Apr. 27, 1985: 785.

had appropriated the year before, that caused the most stir on Capitol Hill and among lobbyists. Not surprisingly, Congress responded by devoting considerably more time and attention to the program in 1985 than ever before. In addition to the general testimony taken from Secretaries Shultz and Weinberger and from General John W. Vessey, Jr., chairman of the Joint Chiefs of Staff, the Senate Armed Services Committee, through its subcommittee on strategic and theater nuclear forces, devoted four days of hearings to the SDI authorization bill, compared with three sessions the previous year. The House research and development subcommittee completed its hearings on SDI in only one day, but its parent body, in closed hearings stretching over six days, took close note also of SDI as it queried senior administration officials.¹¹ And while these investigations were going on, other panels, including the appropriations committees of both bodies, the House Foreign Affairs Committee, and the Senate Foreign Relations Committee, were holding parallel inquiries. All in all, according to one estimate, congressional committees held no fewer than 23 separate hearings on SDI between February and June 1985.¹²

(U) In explaining SDI's need for a large increase, Secretary of Defense Weinberger pointed to the cuts Congress had imposed the previous year and the resulting need to recoup lost ground.¹³ This argument had little credence in Congress, since few there recognized the administration's initial requests as the baseline for future appropriations.¹⁴ Additionally, with competition for funds from other programs and with the FY 1986 budget deficit estimated by the administration to reach \$180 billion or more, it seemed highly unlikely that any defense program, including SDI, would emerge

¹¹ See U.S. Congress, House, Committee on Armed Services, Hearings: Department of Defense Authorization of Appropriations for Fiscal Year 1986, Part 1, Authorization and Oversight, 99:1 (Washington, D.C.: G.P.O. 1985).

¹² Alan Sweedler, "Congress and the Strategic Defense Initiative," in Gerald M. Steinberg, Lost in Space: The Domestic Politics of the Strategic Defense Initiative (Lexington, Mass.: D.C. Heath, 1988), 63.

¹³ Weinberger testimony, Feb. 4, 1985, U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1986, Part 1, U.S. Military Posture, 99:1 (Washington, D.C.: G.P.O., 1985), 56.

¹⁴ See for example the remarks by Rep. W.G. Hefner (D., N.C.), May 7, 1985, U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1986, Part 7, Research, Development, Test, and Evaluation, 99:1 (Washington, D.C.: G.P.O., 1985), 571.

from Congress unscathed, a sentiment echoed by the administration's friends and enemies alike.¹⁵ That cuts would be imposed on SDI appeared inevitable. The only question was how deep they would go.

(U) Thus, as Congress took up consideration of SDI's 1986 budget, SDIO officials, from Abrahamson on down, realized that they would probably wind up with less than they wanted and that many of the cuts Congress was likely to impose would be arbitrary.¹⁶ Part of the problem, according to one SDIO analysis, was that few senators or representatives had yet taken the time to investigate SDI in any detail, either through regular attendance at SDI hearings or through travel, briefings, or other forms of inquiry. The number who had done so was estimated at around twelve to fifteen in the Senate (almost all Republicans) and probably fewer in the House.¹⁷ Even so, SDIO could be reasonably confident that the vast majority in both houses of Congress would agree that research into strategic defenses had to continue, if only as a precaution against possible Soviet breakthroughs in similar research. Where differences were likely to arise was over the level of support that that research should have. Compared with the President's request of \$3.7 billion, SDIO's external affairs office estimated that strong supporters favored no less than \$3.4 billion, while weak supporters of the program thought that \$1.8 billion would suffice. The final figure, as past experience indicated, was likely to be somewhere in between.¹⁸

(U) From the outset of the budget process members of Congress were keenly aware that SDI could not be viewed or handled in isolation from other national security issues. In addition to SDI, the Reagan administration proposed to go forward with a set of weapons systems--the Trident missile submarine, the B-2 "Stealth" bomber, the MX ICBM, and a smaller, single-warhead ICBM called

¹⁵ See especially Goldwater's comments, Feb. 4, 1985, SCAS, Hearings: FY 1986 Authorization, Pt. 1, 6. Deficit figures from Budget of the U.S. FY 1986, p. M-6. In fact, the deficit came to over \$202 billion. See U.S. Office of Management and Budget, Budget of the United States: Fiscal Year 1987 (Washington, D.C.: G.P.O., 1986), p. M-4.

¹⁶ Author's telephone interview with Abrahamson, June 30, 1991.

¹⁷ Memo for the Record by LTC Jon A. Anderson, May 2, 1985, sub: SDI and the 99th Cong.--A Prospectus, SDIO External Affairs, Leg. Liaison Misc. Papers.

¹⁸ *Ibid.*

Midgetman--specifically designed to enhance strategic retaliatory capabilities. To be pursuing development of new strategic offensive systems, on the one hand, and SDI, on the other, seemed to some in Congress contradictory and more than a little bit odd given the administration's repeated denunciations of the doctrine of mutual assured destruction. Administration spokesmen like Weinberger and Under Secretary of Defense for Policy Fred Ikle denied that there was a conflict. Pointing to the strictly research orientation of the program, they downplayed the likelihood that SDI would significantly alter strategic policy or strategic planning in the immediate future. But critics such as Rep. Ronald V. Dellums (D, Calif.), a leading member of the Democratic Black Caucus, and Rep. Barbara Boxer (D., Calif.), a blunt-spoken liberal, were nonetheless suspicious that the ultimate purpose of SDI, in combination with stepped-up emphasis on offensive systems, was to lay the groundwork for what they considered a destabilizing "first strike" capability.¹⁹

(U) A more immediate concern to many senators and representatives was SDI's impact on U.S.-Soviet arms control negotiations, which had been suspended since the Soviet walkout in November 1983. Then, in early January 1985 Secretary of State Shultz and Soviet Foreign Minister Andrei A. Gromyko met in Geneva where they announced that arms control talks were about to resume, with the date later scheduled for March. Included on the agenda were the intermediate range nuclear force negotiations (INF) and the Strategic Arms Reduction Talks (START), both broken off by the Soviet walkout, and a new category of negotiations described in the official communique as "aimed at preventing an arms race in space."²⁰ The latter topic, though still not fully defined, had been added at Soviet insistence and seemed to suggest that SDI might somehow be involved in the renewed round of talks, thus making it a possible bargaining chip. However, the administration hotly denied that this would ever be the case. As one senior administration official maintained: "It is not our intention to negotiate limitations on strategic defense."²¹

¹⁹ See for example Weinberger's remarks cited in New York Times, Mar. 14, 1985; Ikle's testimony, Feb. 21, 1985, SCAS, Hearings: FY 1986 Authorization, Pt. 7, 3437-3439; and Dellums' speech in the House in U.S. Congressional Record, June 20, 1985: H4563.

²⁰ New York Times, Jan. 9, 1985: A1, A10-11.

²¹ Under SecDef for Policy Fred Ikle testimony, Feb. 21, 1985, SCAS, Hearings: FY 1986 Authorization, 3459.

(U) Public and congressional opinion, on the other hand, was not so rigid and generally hoped that the resumption of arms talks would open other new possibilities. According to an ABC-Washington Post poll conducted in January 1985, the public strongly endorsed the renewal of negotiations and was now less enthusiastic about SDI as a result, deeming it less necessary than before.²² One of the poll's findings was that overall public support of SDI had dropped from 54 percent in April 1983, following Reagan's speech, to 49 percent. Congressional opinion likewise overwhelmingly welcomed the reopening of negotiations, no matter what the scope or reason. Some members of Congress argued that it was SDI in the first place that had brought the Soviets back to the negotiating table. But others were dubious and tended to share the sentiments of former Secretary of Defense Clark Clifford that the Soviets would have returned to the talks eventually, though when and under what conditions Clifford neglected not say.²³

(U) In any case, the prospect that SDI might play a pivotal part in this new round of arms negotiations raised for many in Congress an awkward choice between supporting the program, at considerable increase in cost, recognizing that it might ultimately be bargained away; or letting it wither and then be obliged to make up later for lost time should the negotiations fail and deployment become necessary. No one in Congress was eager to bear the onus (or risk being accused) of having undercut the American negotiating position; but at the same time few were as yet ready to make irrevocable commitments to SDI that might lessen their options later. In these circumstances it was more than likely that while Congress would vote to continue the program, it would do so within clearly structured bounds.

(U) A related development to the resumption of arms control talks was the death in early March 1985 of Soviet communist party chairman Konstantin U. Chernenko, a hardline Marxist-Leninist, and his replacement by Mikhail S. Gorbachev. At age 54, Gorbachev seemed to represent the rise to power of a younger, more vigorous, and less ideologically hide-bound generation

²² ABC-Washington Post Poll, Jan. 1985, American Public Opinion Data (microfiche).

²³ Pressler, Star Wars, 71; Clifford testimony, May 1, 1985, U.S. Congress, House, Committee on Foreign Affairs, Hearings: Implications of the President's Strategic Defense Initiative and Antisatellite Weapons Policy, 99:1 (Washington, D.C.: G.P.O., 1985), 176.

of Russian leaders who would be more amenable to enacting much needed economic and political reforms at home and to improving relations with the United States. Although it was still too early to foresee clearly the direction of Gorbachev's policies, the signs were increasingly favorable that a "thaw" in the East-West cold war might soon be at hand.

(U) Given this possibility, congressional preferences were bound to be somewhat fluid and subject to change, as were increasingly the views of constituents. Administration spokesmen, including Secretary of State Shultz, insisted that popular support of SDI was growing.²⁴ But the evidence to support such an assertion was at best mixed. A nationwide telephone poll by the Los Angeles Times in January 1985 showed little enthusiasm for "Star Wars." In fact, over half of those surveyed were in favor of a ban on SDI-related research; only one-third agreed with the administration that research should go forward to find out whether the idea was workable. By far the greatest concern of those contacted in this poll was that efforts to develop a shield against incoming ballistic missiles might be viewed as threatening by the Soviets, who would feel compelled to take offsetting steps, thereby upsetting the tenuous strategic balance and setting back chances for improvements in East-West relations. But a poll by the Gallup organization, taken the following month, turned up somewhat different findings. It indicated that a majority--52 percent--favored further development of SDI and that an even larger majority--68 percent--thought that SDI would increase the likelihood of reaching an arms control agreement with the Soviets. But on the down-side, both polls revealed an astonishingly large number of people--30 percent in the Gallup poll and 50 percent in the Los Angeles Times poll--who knew little or nothing about SDI.²⁵

(U) In his State of the Union message, delivered on February 6, 1985, President Reagan as much as admitted that the credibility of SDI was under attack, conceding for the first time that the

²⁴ See "Shultz Says Plan for Space Defense Is Gaining Support," New York Times, Feb. 1, 1985, p. 1.

²⁵ Los Angeles Times, Jan. 30, 1985: 1,9; George Gallup, Jr., The Gallup Poll: Public Opinion 1985 (Wilmington, Del.: Scholarly Resources, 1986), 49-52.

purpose of the program was "not very well understood."²⁶ In an effort to bridge the gap the White House released a summary pamphlet on SDI describing it as "a program of vigorous research focused on advanced defensive technologies with the aim of finding ways to provide a better basis for deterring aggression, strengthening stability, and increasing the security of the United States and our allies." As part of this effort the administration pledged that SDI research "will be consistent with all U.S. treaty obligations, including the ABM Treaty."²⁷ Subsequently, in March, the Defense Department released its first annual report on SDI in which it offered a somewhat different description of the program. It said that the purpose of SDI was to "provide options for a broader-based deterrence by turning to a greater reliance on defensive systems." This seemed to suggest, the President's vision of making nuclear weapons "impotent and obsolete" notwithstanding, that practical considerations would dictate a mix of offensive and defensive weapons systems for any foreseeable period of time. In addition, the report reaffirmed that SDI was concerned exclusively with research into the feasibility of a variety of potential defensive systems. "It is not," the report stressed, "a program to deploy those systems."²⁸

(FOUO) Despite repeated administration disclaimers about any plans for work other than research on strategic defenses, it was clear by early 1985 that SDI's chances in Congress for large increases in funding hinged on being able to offer something more concrete than bold new ideas. As one SDIO internal memo put it: "It appears that even our supporters . . . (Warner, Wilson, Quayle, and perhaps even Nunn) are growing impatient with our use of the term 'It's only a research program'"²⁹ Emphasis in original. Although any suggestion that SDI might go beyond that point was bound to arouse criticism in some quarters, a clarification of the program's goals, focusing on what

²⁶ "Address Before a Joint Session of the Congress on the State of the Union," Feb. 6, 1985, Public Papers of the Presidents of the United States: Ronald Reagan, 1985 (Washington, D.C.: G.P.O., 1988), 134.

²⁷ U.S. Executive Office of the President, The President's Strategic Defense Initiative (Jan. 1985), i, 2.

²⁸ SDI Rpt to Congress, 1985, 7.

²⁹ Memo, LTC Jon Anderson for LTC William Wight, Mar. 8, 1985, sub: SASC Hearing, 15 Mar 85, SDIO External Affairs, Leg. Liaison, Misc. papers.

might be accomplished in the near-term, appeared the only way of placating and maintaining congressional supporters, including those in the middle-of-the-road. Not only were proponents of space-based defenses like Sen. Malcolm Wallop increasingly dissatisfied with the rate of progress ("I must tell you," Wallop complained to Weinberger at one point, "that he [General Abrahamson] is literally building no weapon, nor any part of any weapon."³⁰), but also there were signs that others--Senators Ernest Hollings and Sam Nunn, for example--wanted a clearer picture from the administration of what it ultimately hoped to accomplish, in what timeframe, and at what cost, before proceeding with further, costly research.³¹ According to the memo of the meeting held on May 14, 1985: "Sen. Hollings feels that a 'research program' is inadequate. He wishes the country to move aggressively to actually field something which would convince our adversaries that we are serious." "How," Nunn wondered, "are we going to get a national decision [on the fate of SDI] if we keep talking about innovative technologies way out in the future?"³² Officials in SDIO urged against succumbing to such pressure, arguing that it would mean a "new start," in effect an abandonment of the goals of the Fletcher panel, that would "dilute the program focus." But there was no way around the fact that SDI's prospects would remain somewhat uncertain until the administration came up with a better idea of its ultimate aims.³³

(U) The administration's initial response to this growing impatience was a broad statement of criteria setting forth a vague timetable and what appeared to be stringent conditions for eventual deployment. In a speech on February 20, 1985, to the World Affairs Council of Philadelphia, Ambassador Paul H. Nitze, one of the key negotiators of the 1972 ABM Treaty and now special advisor to the President and Secretary of State for arms control matters, laid down certain requirements that would have to be met before proceeding with any measures leading to possible

³⁰ Ltr, Wallop to Weinberger, July 29, 1985, SDIO External Affairs, Cong. Correspondence file.

³¹ See for example (FOUO) Memo for the Record by David Finkleman, May 14, 1985, sub: Meeting with Sen. Ernest Hollings, SDIO External Affairs, Leg. Liaison, Misc. Papers.

³² SCAS, Hearings: FY 1986 Authorization, Pt. 7, 3467-3468.

³³ See for example Memo, LTC Eugene E. Kluter, USAF, for Gardner, Apr. 22, 1985, sub: Program Impact of S.879, SDIO External Affairs, Leg. Liaison Misc. Papers.

deployment. Assuming an effective system of protection could be developed, Nitze said, it would have to be survivable and it would have to be "cost-effective at the margin," or cheap enough to add additional defensive capability so that the Soviets would have no incentive to add additional offensive capability to overcome U.S. defenses. As for how and when the United States intended to proceed, Nitze outlined a three-phase transition period, from relying mainly on offensive forces in the near term, to relying mainly on defensive forces in the future. "During the next 10 years," he said,

the U.S. objective is a radical reduction in the power of existing and planned offensive nuclear arms, as well as the stabilization of the relationship between offensive and defensive nuclear arms, whether on earth or in space. We are even now looking forward to a period of transition to a more stable world, with greatly reduced levels of nuclear arms and an enhanced ability to deter war based upon an increasing contribution of non-nuclear defenses against offensive nuclear arms. This period of transition could lead to the eventual elimination of all nuclear arms, both offensive and defensive. A world free of nuclear arms is an ultimate objective to which we, the Soviet Union, and all other nations can agree.³⁴

(U) As demanding as the so-called "Nitze criteria" may have appeared at first glance, they did not in fact impose any new requirements that SDI programmers had not already anticipated. According to Weinberger, "Those criteria . . . routinely are assigned to weapons systems of any kind."³⁵ Concern over such questions as survivability and cost-effectiveness went to the very heart of the 1983 Interagency Working Group report prepared under the coordination of Franklin Miller (see Chapter III), and were similarly in the forefront of a speech on SDI given by Admiral James D. Watkins, Chief of Naval Operations, to the Los Angeles Rotary on January 4, 1985.³⁶ In addition, there were many on Capitol Hill like Rep. Les AuCoin who, from the beginning of the program, felt that assuring survivability of any ballistic missile defense system should be the first research

³⁴ "On the Road to a More Stable Peace," Feb. 20, 1985, Department of State Bulletin 85 (April 1985): 27-29.

³⁵ Caspar Weinberger, Fighting for Peace: Seven Critical Years in the Pentagon (New York: Warner Books, 1990), 321. Emphasis in original.

³⁶ See James D. Watkins, "To Seize the Moment," Proceedings U.S. Naval Institute (Feb. 1985): 13-16.

priority.³⁷ What was new and different about Nitze's rendition of the problem was the clear implication, first, that he was speaking with approval from the highest level, as indeed he was; and second that deployment need not be delayed assuming the cost and viability criteria he mentioned could be satisfactorily met. Nitze himself soon became dubious that they could be.³⁸ But for proponents of SDI, especially those in Congress, the prospect of something more than a research program opened whole new possibilities.

(U) Nonetheless, as the budget approval process for FY 1986 went forward, administration policy continued to be that SDI was concerned solely with research, within the accepted bounds of the ABM Treaty, into a multilayered system of ballistic missile defense.³⁹ This tended to placate critics of the program, but it also tended to exacerbate SDI's growing credibility gap and would, as the year progressed, increase pressure on the administration to rethink its position on the ABM Treaty, particularly with respect to development and testing. At some point, a legislative showdown over the future of the program seemed unavoidable.

Senate Deliberations on
the FY 1986 Authorization Bill

(U) Shortly after the President submitted his budget for FY 1986, the Senate Armed Services Committee began holding open and closed hearings on the authorization bill. Most of the testimony the committee heard covered old ground, resurrecting arguments both pro and con that were by now quite familiar to all concerned. These ranged over the technical capacity and vulnerability of space-based strategic defenses, ultimate costs, the impact of SDI on arms control prospects and the

³⁷ Interview with Robert Sherman, Legislative Aide to Rep. Les AuCoin, Feb. 28, 1990.

³⁸ This based on the author's personal familiarity with Nitze's views and position on SDI.

³⁹ See for example Abrahamson's emphatic reaffirmation of this position, Mar. 19, 1985, in U.S. Congress, House, Committee of Armed Services, Subcommittee on Research and Development, Hearings: Department of Defense Authorization of Appropriations for Fiscal Year 1986, Part 4, Research, Development, Test, and Evaluation--Title II, 99:1 (Washington, D.C.: G.P.O., 1985), 365.

ABM Treaty, the implications for America's allies and their willingness (or unwillingness as the case might be) to collaborate, and, of course, the ultimate goals of the program.

(U) The administration's customary response was that it was still too early to provide concrete answers to most of these questions, but that the strategic value of SDI was beyond question and would only grow as time went on. Pentagon representatives insisted that the ultimate objective remained a population defense of the United States, but they acknowledged that they were looking at interim options as well. One possibility being studied was to reorient the program toward protection of high priority military installations (missile silos, primarily), and gradually add to that system in order to achieve the broader based defense envisioned in the President's 1983 speech. Responding to critics who cited the enormous damage the United States would suffer from an all-out Soviet ballistic missile attack, even against a defensive system 90 percent effective, Under Secretary of Defense Ikle defended some form of strategic protection as better than no defense at all, not so much because it would limit death and destruction but because of the uncertainty of success it would interject into Soviet planning. "It would be grievous destruction, to be sure," he said, "but it would not destroy our military capability." And he added, it would make no difference, from a strategic standpoint, whether space-based defenses shrouded population or military targets, since the ultimate goal was to make any attack as unappealing as possible to an aggressor. "The more effective the defenses," he said, "the less an attack would accomplish in terms of military objectives, hence the more irrational such an attack would be if carried out."⁴⁰

(U) Such a policy may have been sound from a military standpoint, but it lacked appeal politically. Indeed, it struck some committee members as backing away from the President's vision of eliminating the threat of ballistic missiles and only further clouded the ultimate aims and utility of SDI. Nor did it solve the problem of how to exact something from SDI research that might yield near-term benefits should the need arise from a possible Soviet breakthrough in ballistic missile defense. In Georgia Senator Sam Nunn's view, the time was fast approaching when Congress might insist that SDI be reigned in to concentrate on less ambitious (but more realistic and less expensive)

⁴⁰ SCAS, Hearings: FY 1986 Authorization, Pt. 7, 3439.

near-term alternatives. "I thought," he exclaimed to Abrahamson at one point during the hearings, "that we were talking about not an Astrodome to begin with, but we were talking about some interim states of protecting perhaps ballistic missile fields, that give us additional deterrence, and ability to retaliate. It seems to me . . . we are [now] going after the perfect. Until you get the perfect, you are not going to do anything." Echoing sentiments he had expressed before, Nunn believed that the American public was being misled and misinformed on SDI. "I know an awful lot of people have told me . . . we are right on the threshold of being able to achieve something . . . in 5 or 6 years. I wonder at what stage the disillusionment is going to set in."⁴¹

(U) As the committee pressed on with its inquiry Nunn's point that the rhetoric and reality of SDI were not always the same received added confirmation. Testifying on March 19, 1985, former Secretary of Defense James Schlesinger offered his own opinion that the rationale behind SDI as "highly confused and contradictory."⁴² Though more inclined toward a strategy of deterrence based on counterforce than mutual assured destruction, or MAD, Schlesinger doubted that mutual assured survival was a viable alternative to either concept. He labeled it wishful thinking--nothing more--and not likely to become a reality anytime soon. "For members of the administration," he said, "to join in the attack on deterrence as immoral strikes me as quite irresponsible."⁴³ Nunn concurred wholeheartedly, adding that in his view the administration was making a serious mistake by "disparaging" MAD. In its effort to "sell" SDI, he observed, members of the administration "basically have so distorted our present deterrence philosophy that we are undermining the very kind of policy we must continue to rely on for a long time to come."⁴⁴ Sen. J. James Exon (D., Neb.), usually a strong supporter of SDI, agreed that the rhetoric behind the program was "overblown."⁴⁵

⁴¹ *Ibid*, 3467, 3484.

⁴² *Ibid*, 4193.

⁴³ *Ibid*, 4194.

⁴⁴ *Ibid*, 4211, 4213.

⁴⁵ *Ibid*, 4214.

(U) In addition to his skepticism of the strategic rationale behind SDI, Schlesinger was highly critical of SDIO's budget submission, which he considered grossly inflated. Describing himself as "an old time budgeteer," he said he detected "cut insurance" in the size of the request. Based on his own experience of some thirty years as a defense analyst, he estimated that the maximum rate of expansion for any R&D program should not exceed 30 to 35 percent annually. Beyond that he questioned whether additional money could be used efficiently. "Very few programs that I have seen," he said, "research or otherwise, can benefit from a 150-percent increase." All in all, he thought that a budget of \$1.5 to \$2 billion would be perfectly adequate to support needed research.⁴⁶ John Warner, chairman of the subcommittee, conceded that he and other members were poorly equipped to assess the administration's request. "It is very difficult," he said, "for those of us who are not specifically trained in this area [of budgeting] to make an evaluation."⁴⁷

(U) Nevertheless, in reporting an authorization bill to the Senate, the Armed Services Committee expressed continuing strong support for SDI, terming it "a high priority research program" ultimately intended to "provide options to alter the foundations of our strategic security." In practical terms this translated into a recommended authorization for FY 1986 of \$3.422 billion, \$300 million below the President's request. The reduction, the committee said, was unavoidable due to "budgetary constraints." How this reduction should be allocated within the program the committee left to the discretion of the program manager. The committee also endorsed (but did not suggest that it be legally binding) the new strategic concept for a defensive transition outlined by Ambassador Nitze, especially the requirement that strategic defenses be survivable and cost-effective at the margins, and went on to urge closer attention to what it described as "near term" (i.e., within 10 years) defensive deployment systems as a hedge against a Soviet breakout from the ABM Treaty. Reacting to concerns some members had heard expressed by American allies, the committee further urged more consultations with members of the NATO Nuclear Planning Group and welcomed efforts

⁴⁶ *Ibid*, 4205, 4225-4226.

⁴⁷ *Ibid*, 4208.

to develop anti-tactical ballistic missile defense options that would enhance the security of Western Europe.⁴⁸

(U) Attached to the committee's report were the dissenting views of one Republican and three liberal Democrats. The Democrats--Kennedy, Hart, and Levin--all preferred to limit SDI to long-term basic research, thus reducing the priority of the program and its claim on resources. While all agreed that some level of research into strategic defenses should continue (preferably no more than that recommended by former Secretary of Defense Schlesinger), they unanimously condemned the size of the committee's recommended spending as excessive, wasteful, and unnecessary. In Kennedy's view, such an increase was "wholly unjustified in terms of sound investment in research" and represented "a dangerous gamble with our security." It followed, in Kennedy's estimation, that the whole SDI program was folly. "The possibility of making nuclear weapons obsolete through 'Star Wars' technology," he insisted, "is wildly unrealistic."⁴⁹ Levin, who had sponsored an unsuccessful amendment in subcommittee to reduce SDI to \$2 billion, cited other concerns, mainly that spending on SDI was "a diversion of scarce funds away from our conventional forces," which he faulted the committee for neglecting in deference to costly, more glamorous strategic systems.⁵⁰

(U) Hart, then the emerging front-runner for his party's 1988 presidential nomination, concurred with his colleagues that the priority accorded to SDI was "entirely unwarranted." He favored paring the program to \$2.5 billion, the figure under consideration in the House (see below).⁵¹ What concerned him especially were, first, the committee's preference for "near-term technology demonstrations," which he thought would stifle basic research; and second, the absence of what he considered a convincing rationale for SDI. "In light of the serious implications for strategic stability, for arms control, and for the overall direction of our strategic posture," he said,

⁴⁸ S. Rpt. 99-41: 165-167.

⁴⁹ *Ibid*, 426-427.

⁵⁰ *Ibid*, 423.

⁵¹ Congressional Quarterly Weekly Report, Apr. 27, 1985: 786.

"we should not fund the type of dramatic increase in the SDI account contained in this authorization bill until these objectives have been clarified."⁵²

(U) The fourth dissenting view--that by Republican Senator William S. Cohen of Maine--reiterated reservations he had expressed on previous occasions. Echoing Hart's comments, he concurred that he too could find no "coherent explanation of the objectives and implications" of SDI; and, in line with the objections raised by Nunn during the hearings, he said he detected an apparent bias within the program for "exotic" technologies, giving them precedent over the development of systems capable of providing more immediate options against a possible Soviet breakout from the ABM Treaty.⁵³ Obviously, given the wide divergence of opinion on how the program should proceed, committee members were far from being of one mind. But for the time being there was sufficient solidarity between Republicans on the committee and pro-defense Democrats like Nunn and Exon, to stave off heavy cuts in the program.

(U) By the time the defense authorization bill reached the Senate floor for debate on May 17, 1985, the upper chamber had approved a concurrent budget resolution (S. Con. Res. 32) for FY 1986 that provided \$9.1 billion less for defense than the Armed Services Committee had assumed in its original markup. Even though, technically, budget resolutions governed appropriations, not authorizations, it had become customary in both houses to square the authorization bill with the budget resolution. Accordingly, the committee submitted an amended defense authorization bill containing a recommendation of just under \$3 billion for SDI. Though this was an additional 15 percent reduction from the President's original request, Sen. Goldwater, the majority party's manager of the bill, insisted that budgetary constraints, underscored by the growing deficit, were the sole reason for paring the program.⁵⁴

(U) In contrast to the rather routine deliberations and expected actions taken in the Armed Services Committee, the debate on the Senate floor clearly revealed the increasingly divisive nature

⁵² S. Rpt. 99-41: 420.

⁵³ *Ibid*, 417-418.

⁵⁴ Congressional Record, May 17, 1985: S 6475.

of SDI, both politically and ideologically. Indeed, during the course of the debate, which culminated in the early hours of June 5, 1985, the Senate considered eleven amendments to impose constraints on the program, including four that would have reduced the recommended SDI budget authorization. The most worrisome insofar as SDIO officials were concerned was an amendment introduced by Democratic Senator William Proxmire of Wisconsin, who the year before had wanted to make deep cuts in SDI, only to be stymied by lack of support (see Chapter III). This time, with bipartisan backing from fellow Democrat Dale Bumpers of Arkansas, and Republicans John H. Chafee of Rhode Island and Charles McC. Mathias, Jr., of Maryland, he moved to pare SDI to \$1.9 billion and transfer the savings (about \$1.1 billion) to critical military readiness accounts such as ammunition, spare parts, trucks, housing, and weapons for the Reserves and National Guard.⁵⁵

(U) Unlike the other proposals before the Senate to cut SDI, Proxmire's purported to have a well thought-out rationale that made it appear a viable competitor with the administration's submission. Behind the Proxmire amendment were the findings of a study compiled under the supervision of Sidney D. Drell, deputy director of Stanford University's Linear Accelerator Program and coauthor of a recent book highly critical of SDI, faulting it mainly for being unsound scientifically.⁵⁶ Drell's plan, as outlined during an appearance before the Senate Armed Services Committee in March, drew on the results of a Stanford workshop on the impact of SDI on arms control and the ABM Treaty. Convinced that many planned SDI demonstrations would undermine the treaty, the members of the workshop had recommended an alternative approach to ballistic missile defense research involving the elimination of some of these demonstrations and a slowdown of work on others, thereby setting an example for the Soviets to exercise similar restraint.⁵⁷ Among those who participated in the workshop were a number of arms control advocates and outspoken skeptics of ballistic missile defense, including John A. Ernest, Philip J. Farley, John S. Foster, Jr.,

⁵⁵ *Ibid*, June 4, 1985: S 7334.

⁵⁶ See Sidney D. Drell, Philip J. Farley, and David Holloway, The Reagan Strategic Defense Initiative: A Technical, Political, and Arms Control Assessment (Stanford, Calif.: Center for International Security and Arms Control, 1984).

⁵⁷ See "Report of a Workshop at the Stanford Center for International Security and Arms Control," Mar. 13, 1985, in SCAS, Hearings: FY 1986 Authorization, Pt. 7, 4239-4249.

Richard L. Garwin, Sidney N. Graybeal, Thomas Johnson, John W. Lewis, Wolfgang K. H. Panofsky, Theodore A. Postol, Condoleezza Rice, Malvin A. Ruderman, and George C. Smith.

(U) Citing the Stanford plan as his frame of reference, Proxmire defended his amendment as designed to assure "high quality research . . . without wasting money on demonstration projects." Like the bill before House (see below), the Proxmire amendment would "fence" spending under specific categories of activity in order to limit growth in research testing to no more than 4 percent annually, instead of letting the program manager decide on allocations and the pace of research. The experimental areas most severely affected would be the kinetic energy weapons (KEW) and surveillance, acquisition, tracking, and kill assessment (SATKA) programs, both of which were nearing critical demonstration testing stages.⁵⁸ At one point SDIO Director Abrahamson labeled the Drell plan as being "riddled with inconsistencies."⁵⁹ In addition to their misgivings over the disruptions the amendment would cause, senior SDIO officials rued the precedent that fencing their programs would set. As one put it: "The detailed distribution of funds has no basis of rhyme nor reason. This is an example of irresponsible and destructive congressional micro-management of DOD efforts."⁶⁰

(U) All the same, of the various spending amendments before the Senate, Proxmire's stood perhaps the best chance of any of coming closest to passing. As the debate progressed, it became clear that one especially appealing aspect of the amendment was that while it allowed senators to demonstrate their support of strategic defense research, they could do so without making irrevocable commitments to a program that some, mostly liberal Democrats but moderate Republicans as well, still saw as shrouded in confusion, uncertainty, and ambiguity. As one of the cosponsors of the measure, Mathias questioned the strategic implications of SDI, arguing that, contrary to administration assertions, SDI was a destabilizing influence. Not only would it leave the NATO

⁵⁸ Congressional Record, June 4, 1985, S 7334-7335, S 7341.

⁵⁹ Abrahamson testimony, May 7, 1985, HCA, Hearings: DoD Appropriations for 1986, Pt. 7, 626.

⁶⁰ Memo, Gerold Yonas for Director, SDIO External Affairs, May 16, 1985, sub: Proxmire Bill, SDIO External Affairs, Leg. Liaisons Misc. Papers.

allies at risk, he argued; it would also undermine efforts, as recommended by the Scowcroft Commission, to develop a single warhead ICBM--the Midgetman--and to encourage the Soviets to reduce their number of strategic warheads by doing the same. "Star Wars," Mathias contended, "is a torpedo aimed at sinking the Midgetman."⁶¹

(U) Sen. Albert Gore, Jr. (D., Tenn.), a moderate on defense matters and sponsor of an amendment of his own to trim SDI, generally concurred that, from a strategic standpoint, SDI lacked credibility. "The American people," he said, "support the idea of exploring the chance that we could create a population defense. . . . But I do not believe that the American people really support an effort to go back and undo the ABM Treaty and get into two arms races instead of one--defensive as well as offensive--because that is what this is going to do, if it ends up being what I suspect it will end up being."⁶²

(U) Others supported the Proxmire amendment because they thought it would curb a program that was getting out of hand. Said Sen. J. Bennett Johnston, an increasingly outspoken critic of SDI: "The truth of the matter is we do not know what star wars is. It is a whole collection of technologies that we are going to be chasing out there with the almighty American dollar." "What I am saying," he added, "is we are being asked to go way too fast to get to a destination we know not of and the purpose of the trip is as yet undefined. So I say, let us slow it down a little bit."⁶³

(U) Nunn, to whom many in the Senate looked for guidance in such matters, agreed that there were still aspects of the program that cried out for clarification. He thought that the Nitze criteria had given it a completely different definition than Reagan, Weinberger, or Abrahamson had been using. Nonetheless, he opposed the Proxmire amendment, partly because he thought it would lead to congressional micromanagement the program, but more importantly because he saw it delaying key demonstrations that would give a better picture of SDI's potential.⁶⁴ Sen. Larry Pressler,

⁶¹ Congressional Record, June 4, 1985: S 7340.

⁶² *Ibid*, S. 7343.

⁶³ *Ibid*, S 7353-7354.

⁶⁴ *Ibid*, S 7354-7355.

though a skeptic of SDI, likewise opposed the Proxmire amendment because of the potential effects it might have on the U.S. negotiating position in Geneva. Citing a conversation he had had with West German Foreign Minister Hans-Dietrich Genscher in April, Pressler said that in Genscher's view, it had been SDI that had driven the Soviets back to the negotiations.⁶⁵

(U) Although the Proxmire amendment went down to defeat more easily than expected (38-57), the fact that 6 Republicans joined 32 Democrats in voting for the measure suggested an erosion of support for SDI within the President's own party. On the other hand, though, the prevailing sentiment on both sides of the aisle was that it was too early to limit SDI in the ways its critics proposed. As a result, other amendments to pare the program fared no better. These included motions offered by freshman Sen. John Kerry (D., Mass.), who wanted to freeze SDI at its FY 1985 level of \$1.4 billion; by Sen. Gore, who urged cutting the program's authorization to \$2.5 billion, the figure recommended in the House bill; and by Sen. John Glenn who, describing himself as "a very firm believer in the SDI goals," offered a modest proposal to exact token reductions lowering the program to \$2.8 billion. Another proposal, offered by Sen. Malcolm Wallop, specifying that \$800 million in the SDI authorization be earmarked for the actual building of strategic defenses to be deployed over the next five to seven years, likewise failed. In addition, the Senate rejected an amendment by Bumpers that would have created a congressionally-appointed review panel to monitor SDI; approved an amendment put forth by Mathias commissioning a comprehensive study by the Congressional Budget Office and the Joint Economic Committee of the R&D impact of SDI; and adopted an amendment sponsored by Proxmire making the Nitze criteria legally conditional for the deployment of SDI. Finally, by voice vote, the Senate also approved a Pressler amendment expressing the sense of the Senate that the President should continue consultations with the NATO allies on SDI. All in all, it was a long evening that did not significantly alter either the form or the substance of the bill before the Senate.⁶⁶

⁶⁵ *Ibid*, S 7357.

⁶⁶ *Ibid*, June 4-5, 1985: S 7326-7385.

The Authorization Bill in the House

(U) The authorization bill taken up in the lower chamber turned out to contain significantly different provisions from those in the Senate bill, beginning with a recommendation by the House Armed Services Committee that the President's proposed level of spending on SDI be sharply reduced. Even though they heard essentially the same testimony and received the same background information as their Senate colleagues, the committee's Democratic majority could find no justification for the level of spending Reagan wanted. This produced a partisan rift which the committee eventually had to settle in closed session. The outcome was a compromise recommendation of just under \$2.5 billion for SDI, a reduction of approximately one-third from the President's request, but still a 75 percent increase over the previous year's appropriation. Committee Chairman Les Aspin, said to be concerned that some planned SDI experiments might verge on violation of the ABM Treaty, preferred that the reduction go further, to less than \$2 billion, while Rep. Ronald Dellums offered an amendment that would have reduced the amount to \$1.1 billion. Two other amendments to reduce the SDI authorization--one by Rep. Nicholas Mavroules (D., Mass.), an outspoken opponent of the MX missile and other defense programs, and another by Thomas M. Foglietta (D., Pa.)--likewise failed to pass.⁶⁷

(U) The prevailing sentiment on the committee was that SDI deserved "a large measure of credit" for bringing the Soviets back to the Geneva arms control talks; hence the preference to compromise at \$2.5 billion, a figure that a majority on the committee felt best expressed their continuing support for SDI as it contributed to arms control. Unlike the bill before the Senate, moreover, the House legislation proposed specific line item cuts instead of leaving it up to the program manager to decide how and where reductions should be accommodated. The most significant cuts were in programs with near-term potential, including a 41 percent reduction in KEW

⁶⁷ "Critics Take Aim at Pentagon Anti-Missile Plan," Congressional Quarterly Weekly Report, Apr. 27, 1985, 785-786; "Aspin Seeks to Slow and Alter Reagan's 'Star Wars' Program," *ibid*, June 1, 1985: 1067.

research and a 36 percent cut in the SATKA program.⁶⁸ Supporters of SDI, like Rep. Jim Courter (R., N.J.), complained that if these reductions in funding stood, they would set the program back by two years or more, possibly even reducing it to "endless research yielding no definitive results."⁶⁹ Rep. Ken Kramer, coauthor of the stillborn People Protection Act and another strong proponent of SDI, warned that "the recommended funding level, if ultimately accepted by the Congress and signed into law, will emasculate the program."⁷⁰ SDIO Director Abrahamson was especially concerned. As Abrahamson saw it, if the House-proposed reductions were allowed stand, "we [in SDIO] will have to dramatically change a whole series of programs themselves."⁷¹ But critics of SDI who sat on the committee, including Dellums, Mavroules, Patricia Schroeder (D., Colo.), and others considered the recommended authorization excessive and vowed to seek further cuts when the bill reached the House floor.⁷²

(U) On June 20, two weeks after the Senate completed voting on the SDI authorization, the House took up the matter in a full-scale debate. This was the first time the House had done so and it turned out to be a revealing display of members' preferences and prejudices, even though some of the arguments both pro and con bordered on the frivolous. In the end, most members adopted a "wait-and-see" attitude on SDI. Of the six amendments on which roll call votes occurred, the only one to survive was an amendment by Rep. Melvin Price reiterating the Armed Services Committee's recommendation of \$2.5 billion. As Aspin put it when the voting was finished: "People are cautious. A committee position is something to hang your hat on."⁷³

(U) Though it dragged on for some 7 hours, the House debate was, in a sense, much more spirited and lively than the Senate's. Instead of considering amendments separately, as the Senate

⁶⁸ H. Rpt. 99-81: 15-16.

⁶⁹ *Ibid*, 454-456.

⁷⁰ *Ibid*, 465.

⁷¹ Abrahamson testimony, May 23, 1985, HCA, Hearings: DoD Appropriations for 1986, Pt. 7, 678.

⁷² *Ibid*, 451-452, 459.

⁷³ Quoted in Congressional Quarterly Weekly Report, June 22, 1985: 1195.

had done, the House lumped the proposed spending amendments before it together, so that the ensuing exchange did truly resemble a debate in the classic sense.

(U) Like the Senate, the House was increasingly divided over SDI, as evidenced by the broad range of amendments that the House considered. One of these, a proposal by Democrat Charles Bennett of Florida, requiring the Secretary of Defense to submit, along with his FY 1987 budget, an estimate of probable Soviet responses to full deployment of "star wars" weaponry, passed handily by voice vote. But another by Colorado Republican Ken Kramer to provide an additional \$525 million for SDI by canceling the Midgetman ICBM lost. In Kramer's view the time had come to begin the transition from offensive to defensive strategic weapons systems, beginning with elimination of the next generation of ICBMs, the Midgetman. But even proponents of SDI, like Rep. Elwood Hillis (R., Ind.) doubted the soundness of such an approach. Observing that Midgetman had received the strong endorsement of the Scowcroft Commission, Hillis urged the House to bear in mind that that same missile system might also be "a key element of future arms control negotiations."⁷⁴

(U) The most restrictive amendment--referred to by many in Congress as a "kamikaze amendment" because of the devastating impact it would have--was that put forth by California Congressman Dellums who had tried, but failed, in committee to pare SDI to \$1.1 billion. Resurrecting his amendment on the House floor, Dellums now proposed reducing the program to \$955 million, along with the total elimination of demonstration projects and all research involving nuclear energy. In explaining the purposes behind his amendment, Dellums made clear that he regarded the "astronomical" potential costs of SDI a threat to social welfare programs he favored. As far as Dellums was concerned, SDI was an unwarranted burden at a time when "the misery index in this country among farmers and rural and suburban Americans is moving up steadily and rapidly."⁷⁵ An aide acknowledged that Dellums' main goals were to restrict the ballistic missile

⁷⁴ Congressional Record, June 20, 1985: H 4556-4557.

⁷⁵ *Ibid*, H 4563, 4565, 4570.

defense program to "basic research," and to dismantle SDIO and turn research back over to the military services and DARPA.⁷⁶

(U) Although it was clear from the outset that the Dellums amendment stood little chance of passing, it gave the more ardent opponents of SDI an opportunity to vent their views. Rep. John Conyers, Jr. (D., Mich.), who like Dellums was also prominent in the Black Caucus, thoroughly disapproved of SDI; he thought "this whole space initiative should be turned back."⁷⁷ Rep. Boxer questioned whether SDI was workable and doubted that even a 90 percent effective system could be devised. The entire concept, she concluded, was a "destabilizing nightmare."⁷⁸ And Colorado's Patricia Schroeder used her time at the podium to denounce the "outrageous" spending SDI involved, contending that Pentagon inefficiency would wind up wasting most of it. She also suggested that those who favored SDI were pandering to sexist impulses. "We are just having a big macho argument," she said, "over who can shove the most money in the program, and the one who can . . . is clearly the one for a strongest America."⁷⁹ But despite these protests against SDI, there was never any doubt, as Henry Gonzalez (D., Texas) ruefully put it, that those wanting to cut SDI to such an extreme were "tilting at windmills."⁸⁰ As it happened, the Dellums amendment lost by an exceedingly lopsided margin (102-320), with only three Republicans voting for it.⁸¹

(U) Nor were proponents of SDI any more successful. A proposal sponsored by New Jersey Republican Courter to restore the House authorization to the full amount of the President's request, \$3.7 billion, likewise went down to easy defeat. Officials in SDIO's External Affairs office were probably indulging in a bit of wishful thinking when they rated the Courter amendment as having

⁷⁶ Author's telephone interview with George O. Withers, Legislative Director of Rep. Ronald V. Dellums, Feb. 27, 1990.

⁷⁷ Congressional Record, June 20, 1985: H 4565.

⁷⁸ *Ibid*, H 4572.

⁷⁹ *Ibid*, H 4573.

⁸⁰ *Ibid*, H 4579.

⁸¹ Congressional Quarterly Almanac, 1985, 136.

a "moderate chance" of passing.⁸² In fact, it lost by almost the same margin (104-315) as the Dellums amendment and attracted barely a majority (97-83) of House Republicans.⁸³

(U) Courter and his supporters defended SDI's need for full funding on a variety of grounds. Courter, for his part, resurrected the administration's argument that the time had come to take steps to replace the discredited concept of mutual assured destruction with something more positive and durable. As Courter saw it, MAD was an inherently dangerous doctrine "based on the paradoxical assumption that it is somehow safe to be vulnerable, not to defend yourself, and that it is somehow dangerous to defend yourself."⁸⁴ He estimated that without SDI the United States would probably still be spending somewhere between \$2.5 and \$2.8 billion on strategic defense research. Anything below these figures, he said, would be a "negative response" to the President's vision.⁸⁵

(U) Republican Jack Kemp of New York, a leading House conservative and a cosponsor of the Courter amendment, drew attention to two additional points: (1) that SDI would provide more effective protection, yielding in turn a stronger deterrent to war; and (2) that it would lessen the Soviet Union's offensive strategic advantage.⁸⁶ Rep. Henry J. Hyde (R., Ill.), another supporter of the amendment and a critic of the ABM Treaty, thought that the MAD concept of deterrence, relying ultimately on the targeting of civilian populations, was morally reprehensible. "It seems to me," he said, "that if you take to heart the fact that you morally cannot deliberately target innocent people for destruction, then you have to look to some other means to defend yourself."⁸⁷ But while proponents of full funding may have scored points on the basic need for SDI, raising in the process questions about the continuing viability and morality of MAD, they were essentially unable to make

⁸² See Memo for the Record by LTC Jon A. Anderson, June 7, 1985, sub: SDI and the HASC Floor Debates, SDIO External Affairs, Legislative Liaison Misc. Papers.

⁸³ "House Meets Reagan Partway on Defense Plans," Congressional Quarterly Weekly Report, June 22, 1985: 1196.

⁸⁴ Congressional Record, June 20, 1985: H 4567.

⁸⁵ *Ibid*, H 4571.

⁸⁶ *Ibid*, H 7574.

⁸⁷ *Ibid*, H 4568.

a convincing case for the merits of their own proposal. In particular, they were unable to demonstrate why a funding level of \$3.7 billion was preferable to the committee's mark of \$2.5 billion or even some lower figure as long as SDI was no more than a "research" program within the confines of the ABM Treaty. Between the administration's conception of the program and the potential benefits held out by Courter, Kemp, Hyde, and other proponents was a chasm that had yet to be bridged. Clearly, in the House as in the Senate, the appeal of the administration's rationale for SDI was showing signs of waning.

(U) Most members, as usual in such controversial situations, preferred the safe, middle ground. Thus, they also rejected, in a vote mainly along party lines, a proposal by Rep. Marjorie S. Holt (R., Md.) to increase the SDI authorization to \$2.9 billion, the figure voted by the Senate; and they similarly turned down an amendment by Mavroules to cut the SDI authorization to \$1.4 billion, the same as in FY 1985.⁸⁸ In unsuccessfully urging approval of Mavroules' amendment, his fellow Democrat and colleague from Massachusetts, Gerry E. Studds, offered a colorful and impassioned attack on SDI. Terming it the product of "wishful thinking," he ridiculed SDI as "the Edsel of the 1980s" and denounced it as perhaps "the purest demonstration we have ever witnessed in this country of the military-industrial complex at work." Airing a growing concern among liberals on Capitol Hill, he cited the growing number of contracts associated with the program and speculated that SDI might be becoming "the first truly invulnerable weapons system" because it would have "defense contractors in every single congressional district in the United States." In these circumstances, Studds averred, the country could become addicted to SDI, which in turn would add wastefully to the deficit and mean less money for more worthy domestic social programs, Social Security, transportation, and the environment.⁸⁹

(U) SDIO's most serious concern was an amendment sponsored by Rep. Norman D. Dicks (D., Wash.), acting on behalf of House Armed Services Committee Chairman Aspin, whose growing skepticism of SDI and concern that it would subvert the ABM Treaty were undisguised. In the

⁸⁸ *Ibid*, H 4625, 4634-4635.

⁸⁹ *Ibid*, H 4577-4578.

weeks leading up to the debate Aspin had canvassed fellow House members in search of a funding level that would be high enough to win moderate support without being so high as to alienate liberal SDI opponents. Starting at \$1.9 billion, Aspin eventually settled on a figure of \$2.1 billion, a 50 percent increase apparently aimed at appeasing those who saw SDI as a key factor in keeping the Soviets interested in arms control. In explaining the particulars of the amendment, Dicks noted that it also contained "some very important limitations on the money that can be spent so that we stay in compliance with the ABM agreement." Earmarked for limitations were several high-priority demonstration projects, including the airborne optical detection system, the space-based hypervelocity launcher (a mid-course defense using miniature kill projectiles), the space-based kinetic-kill vehicle, and the space-based laser, all in Dicks' (and Aspin's) view likely to run afoul of the ABM Treaty.⁹⁰ But in a vote decided by conservative Democrats joining an almost solid Republican phalanx, the Dicks amendment fell short, 195-221, though it was the closest that any of the spending amendments came to passing.⁹¹

(U) Thus, at the end of a long but stimulating exchange of views, the committee mark prevailed.⁹² This did not mean that opposition in the House had slackened--far from it. On the contrary, the House-passed figure was nearly \$500 million below the Senate's and about a third less than the administration had requested. Perhaps the clearest outcome was that those with the swing votes--middle-of-the-road Democrats, for the most part--were willing to go along with moderate growth in SDI as long as they saw it contributing to the furtherance of arms control. Moreover, as the debate clearly demonstrated, proponents of SDI were on the defensive in arguing for larger increases in a "research" program, as the administration persisted in describing it, which could not, under the governing rules, yield any tangible results in the foreseeable future without implicitly (or explicitly) subverting the ABM Treaty. In short, means and ends had yet to mesh, a problem that the administration needed to address in terms that would yield a satisfactory political compromise.

⁹⁰ Pressler, Star Wars, 89-90.

⁹¹ *Ibid*, H 4633-4634.

⁹² *Ibid*, H 4635-4636.

Conference Compromise

(U) Resolving the differences between the House- and Senate-passed versions of the authorization bill fell to the conference committee, headed by Goldwater and Nunn from the Senate and Aspin and Dickinson from the House. Not surprisingly, SDIO lobbied vigorously for adoption of the Senate version as the best available option, contending that the House bill would cause "major disruptions in the program" and "serious delay" in reaching the benchmarks established by the Fletcher panel for deciding on possible future development and deployment.⁹³ But probably more important insofar as the committee's deliberations were concerned was the announcement on July 2 that President Reagan and General Secretary Gorbachev had scheduled a summit meeting in Geneva for November 19-20, 1985, to discuss, among other things, arms control, SDI, and the ABM Treaty.⁹⁴ Not wanting to appear to be undercutting the President's negotiating position, the committee generally deferred to the more generous and less restrictive Senate bill.

(U) On the key issue--funding--the conference committee, in its report of July 29, 1985, restored to the venerable practice of splitting the difference between the lower sum approved by the House and the higher figure voted by the Senate, thus making for an authorization of \$2.75 billion. Explaining its decision, the committee stated that it was still "strongly supportive" of SDI insofar as its goal was to determine "the feasibility of developing strategic defenses for the United States and its allies." But the committee also voiced certain reservations. These included, first, the conferees' concern over the administration's reluctance to clarify "the main elements of an effective SDI . . . and . . . specific technologies . . . likely to comprise such a system"; second, whether "adequate emphasis" was being given to "near-term options"; and third, how SDI was being structured to assure "full compliance" with U.S. arms control obligations. With respect to this last concern, the committee

⁹³ Memo, J. David Martin, Dir. SDIO External Affairs, for ASD(C), July 3, 1985, sub: SDI Input to Appeal for DoD Authorization Conference, SDIO External Affairs, Legislative Liaison, Misc. Papers.

⁹⁴ "President to Meet Gorbachev 2 Days in Fall in Geneva," New York Times, July 3, 1985: A1, A5.

asked that, as part of the FY 1987 budget submission, the administration provide information as to how it was distinguishing between permitted "research" and prohibited "development," and the ways in which planned technology demonstrations would be conducted in a manner consistent with this distinction.⁹⁵

(U) Without providing details, the conferees also criticized SDIO's handling of its mission, noting that "SDIO does not appear to provide for the smooth and efficient management of the program" or that it might not be optimally suited for "aggressive research." The gist of the report was that SDIO was not sufficiently independent of the Pentagon bureaucracy and that it needed more direct control over its budget. Additionally, the conferees approved the Bennett amendment requiring a report from the Secretary of Defense on probable enemy responses to an SDI deployment; rejected the House-passed "fencing" provision allocating reductions within specific categories in favor of allowing the SDIO director to allocate cuts; and reaffirmed, as both houses had done, their full support of the ABM Treaty and opposition to the use of funds that might contravene the treaty.⁹⁶

Appropriations

(U) Even though Congress for the most part still professed to support SDI, it was clear by the end of the debate over the FY 1986 authorization bill that opposition to the program was healthy and growing. Thus, to obtain funding, the administration had to redouble its efforts at convincing Congress that SDI merited the full support of the authorization. To be sure, this was 25 percent less than the administration had requested; but it was also nearly double the previous year's appropriation, an extraordinarily large increase, as Abrahamson himself later readily acknowledged, for an R&D program.⁹⁷ Critics would, of course, continue to argue that increasing the program to

⁹⁵ H. Rpt. No. 99-235: 402-403.

⁹⁶ *Ibid*, 403-404.

⁹⁷ Author's telephone interview with Abrahamson, June 30, 1991.

such an extent was excessive, unnecessary, and perhaps dangerously destabilizing to U.S.-Soviet relations. But to the vast majority of members it seemed a reasonable request and one they were not inclined to scrutinize further in view of the upcoming summit between Reagan and Gorbachev.

(U) Once again, the key to SDI's immediate future lay with the Democratic majority that controlled the House of Representatives. Although the balance of power on the House floor rested with an informal coalition of Republicans and conservative and middle-of-the-road Democrats, the initiative belonged to the more assertive and outspoken liberal Democrats and a handful of moderate Republicans, many of whom sat on the appropriations panel. During consideration of the FY 1986 authorization bill, in fact, 34 of the 57 members of the House Appropriations Committee voted for the Dicks amendment to trim SDI to \$2.1 billion. While it was not uncommon for members of Congress to vote one way on the authorization and another on the appropriation, the fact that a majority on the appropriations panel favored a lower figure suggested trouble insofar as the final outcome was concerned. Having spotted this possible difficulty, SDIO's External Affairs Office immediately alerted Abrahamson, suggesting that he look into finding a "champion," preferably Rep. Bill Chappell, Jr. (D., Fla.), the second ranking Democrat on the House Defense Appropriations Subcommittee and a strong supporter of SDI, to head off an additional round of cuts during the committee's markup.⁹⁸ As it happened, a twist of fate giving Chappell temporary control of the committee would work to SDI's advantage.

(U) As attention turned to the appropriations bill, SDIO's greatest concern was the attitude of the subcommittee's chairman, Rep. Joseph P. Addabbo (D., N.Y.), who late in 1984 had predicted a leveling-off, if not a reduction, in SDI funding (see Chapter III). A perennial skeptic of nearly all Pentagon spending requests, Addabbo was especially suspicious of SDI. Shortly after the vote on the authorization bill, reports appeared in the press that he and arms control lobbyists, including Nobel physics laureate Hans Bethe, had met and agreed that a funding level of \$1.7 billion would be sufficient to support necessary research.⁹⁹ But by the time the appropriations bill came up for

⁹⁸ Memo, Anderson for Abrahamson, July 1, 1985, sub: HAC Members Voting Breakout on SDI, SDIO External Affairs, Legislative Liaison, Misc. Papers.

⁹⁹ Congressional Quarterly Weekly Report, July 20, 1985: 1412.

action in September, Addabbo was in the hospital, terminally ill as it turned out with a kidney ailment. With Addabbo thus removed from the scene, chairmanship of the subcommittee fell to Chappell.

(U) Although Addabbo continued to urge opposition to SDI from his sickbed, the burden of the cause fell to his colleague and friend Robert J. Mrazek (D., N.Y.), who proceeded to organize a bipartisan anti-SDI coalition among committee members. It included Representatives Vic Fazio (D., Calif.), renowned on Capitol Hill for his powers of rhetorical persuasion, Matthew F. McHugh (D., N.Y.), Les AuCoin (D., Ore.), Steny H. Hoyer (D., Md.), Bill Alexander (D., Ark.), Ronald D. Coleman (D., Texas), John Edward Porter (R., Ill.), and Bill Green (R., N.Y.). According to press accounts, the group's main concern was that any intensification of efforts to develop large-scale anti-missile defenses would undermine the prospects for arms control and exacerbate U.S.-Soviet tensions. But in proposing possible cuts that would reduce SDI to \$1.75 billion, the coalition steered clear of strategic and ideological issues and, in keeping with committee practice, proposed savings on narrowly defined technical and managerial grounds, including cuts that would eliminate the four controversial demonstration tests that opponents of SDI feared would subvert the ABM Treaty.¹⁰⁰ However, with Chappell chairing the subcommittee their importunings received a cool reception. When the subcommittee met on October 3 to mark up the defense spending bill, it rejected the coalition's figure in favor of Chappell's proposal of a \$2.5 billion appropriation, the same as the House-passed authorization.¹⁰¹

(U) As action by the full committee neared, President Reagan personally intervened on SDI's behalf by inviting the members of the House Appropriations Committee to meet with him and Secretaries Shultz and Weinberger at the White House on October 22. The main purpose of the meeting was to forestall the proposal of additional SDI budget cuts, but it also provided Reagan with an opportunity to issue a veiled warning that he might be forced to accept a controversial reinterpretation of the ABM Treaty allowing for more liberal testing should Congress reduce SDI

¹⁰⁰ Congressional Quarterly Weekly Report, Sep. 21, 1985: 1891.

¹⁰¹ "Defense Appropriators Back Spending Freeze," Congressional Quarterly Weekly Report, Oct. 5, 1985: 2021.

funding. Although Reagan repeated his often stated position that SDI was not up for negotiation, he also insisted that he needed strong congressional backing of SDI in order to deal effectively with Gorbachev in November.¹⁰² Some, including one of the committee's leading liberals and second ranking Democrat, Rep. Edward P. Bolland (D., Mass.), found Reagan's presentation convincing. "I don't think we ought to be tying the president's hands," Bolland told the press after the session, "when he's got such an important meeting coming up with Gorbachev."¹⁰³ But others--Fazio especially--remained skeptical. Since SDI was not going to be negotiated, Fazio wondered, what difference would it make if Congress voted reductions in the program in the interests of managerial efficiency?¹⁰⁴

(U) Still, by the time the meeting was over, it was clear that congressional opponents of SDI had suffered a temporary setback, owing to Reagan's charisma and the traditional reluctance of members of Congress to be seen as hindering a president engaged in negotiations with the Soviets. The next evening, even though they knew they would fail, SDI opponents on the committee decided to try for reductions anyway, though instead of cutting the program to less than \$2 billion as previously planned, they chose \$2.1 billion as their target. This figure was the same as the Dicks amendment to the authorization bill which, while defeated, had nonetheless received strong endorsement on the House floor. But on October 24, by a vote of 31-23, the committee turned down Fazio's proposal in favor of an appropriation of \$2.5 billion.¹⁰⁵ Subsequently, on October 30, following one of the briefest debates on the defense budget in its recent history, the full House upheld the committee's recommendation. The only challenge, in fact, came from Rep. Robert S. Walker (R., Pa.), who wanted to increase the appropriation to the authorized limit of \$2.75 billion.¹⁰⁶ But at the urging of Chappell and others who thought it unwise to press the issue further, he

¹⁰² Washington Post, Oct. 23, 1985: A4.

¹⁰³ "Star Wars' Survives Proposed Appropriations Cut," Congressional Quarterly Weekly Report, Oct. 26, 1985: 2178.

¹⁰⁴ *Ibid.*

¹⁰⁵ *Ibid.*, 2175.

¹⁰⁶ Congressional Record, Oct. 30, 1985: H 9406.

withdrew his amendment. As Chappell put it: "It is time for us to be realistic on this matter. . . . If it [the Walker amendment] loses on the floor, it certainly does not help the President's position for the summit."¹⁰⁷

(U) Meanwhile, the very same day as the House was wrapping up action on a defense appropriations bill, the Senate Defense Appropriations Subcommittee approved a military spending measure that included \$2.96 billion for SDI, some \$200 million more than allowed by the authorization legislation which had cleared Congress on October 29 but had not yet been signed into law. In urging his colleagues to support the \$2.96 spending limit, subcommittee chairman Ted Stevens of Alaska stressed the need for bargaining leverage with the House. But, Stevens said, should the authorization bill become law before the full committee markup of a defense appropriations bill, scheduled for November 5, he would move to reduce SDI funding to \$2.75 billion, the limit agreed in the conference committee.¹⁰⁸

(U) As it happened, White House action on the authorization law was still pending when the full Senate Appropriations Committee met on November 5. The only challenge to the subcommittee's recommendations on SDI, which eventually passed easily by voice vote, came from Sen. J. Bennett Johnston (D., La.), who offered an amendment to create a congressionally appointed blue-ribbon panel to analyze the cost and technical feasibility of space-based strategic defenses. The vote to reject Johnston's amendment (15-13) was mainly along party lines, except for two Republicans--Mark O. Hatfield of Oregon, chairman of the appropriations committee, and Lowell P. Weicker, Jr., of Connecticut, one of the few Republican liberals in the Senate--who voted in favor of the amendment; and two Democrats--John C. Stennis of Mississippi and Ernest F. Hollings of South Carolina--who voted against it. Sen. Lawton Chiles (D., Fla.), a supporter of the amendment, chose not to vote. Johnston also had in his pocket a second amendment he intended to offer reducing the SDIO appropriation to \$2.1 billion. But after the committee rejected his study

¹⁰⁷ *Ibid.*, H 9407.

¹⁰⁸ See "Stevens Panel, in Markup, Looks to Bargaining," Congressional Quarterly Weekly Report, Nov. 2, 1985: 2221.

commission proposal, Johnston dropped the idea. "If we can't pass a commission," he said afterwards, "I don't think we can deal with the funding level."¹⁰⁹

(U) Like the House, the Senate moved quickly to approve the committee's recommendations on defense spending, including SDI, before current funding ran out on November 14.¹¹⁰ But because of further legislative delays it was not until December 19 that the House and Senate reached a compromise on a defense appropriations continuing resolution that gave SDIO \$2.75 billion, the ceiling set by the authorization bill.¹¹¹ Although a sizable increase over the \$1.4 billion appropriated the previous year, it was SDIO Director Abrahamson's assessment that funding for FY 1986 would be insufficient to sustain the full range of research on more complex weapons systems, such as space-based lasers and high-powered electromagnetic rail guns, as had been planned. Accordingly, Abrahamson announced that due to budgetary constraints, he would probably have to curtail these programs in favor of concentrating on relatively simpler, cheaper, and potentially less effective land-based lasers and killer rockets.¹¹²

(U) Abrahamson, of course, may have seen no other course. But whether the administration could have avoided this situation, fending off the budget cuts that Congress mandated, seems highly unlikely, given the political climate at the time and the earnest concern in Congress over growing budget deficits. By the same token, though, opponents of SDI probably could not have fared better either in exacting reductions. All in all, the resulting budget compromise did in fact give SDI a considerable boost, but not one that would necessarily deny Congress the ability to maintain future control over the direction, scope, and pace of the program.

¹⁰⁹ "Rejecting a 'Star Wars' Study, Panel Approves Spending Bill," Congressional Quarterly Weekly Report, Nov. 9, 1985: 2330.

¹¹⁰ See S. Rpt. No. 99-176: 326-329.

¹¹¹ H. Rpt. No. 99-450: 264.

¹¹² "Cutbacks to Alter Form of Antimissile Program," New York Times, Nov. 27, 1985: A14.

FIGURE IV-2
SUMMARY OF CONGRESSIONAL ACTION
ON THE FY 1986 SDIO BUDGET
(\$ in millions)

President Requested	\$ 3,722
Senate-passed Authorization	2,970
House-passed Authorization	2,470
Congress Authorized	2,750
Senate-passed Appropriation	2,962
House-passed Appropriation	2,500
Congress Appropriated	\$ 2,759

Sources: H. Rpt. 99-235: 402; H. Rpt. No. 99-450: 264.

The ABM Treaty Interpretation Dispute

(U) As the debate over SDI's FY 1986 budget indicated, a growing concern on Capitol Hill was the effect space-based defenses might have on the 1972 ABM Treaty, and in particular whether SDI research could realistically be conducted within the treaty's bounds. These questions came up repeatedly in committee hearings and were frequently raised again during debate on the House and Senate floors. The administration's position was that it had no intention and saw no immediate need to conduct tests that might violate the treaty, even though there was strong evidence that the Soviet Union's ballistic missile defense program was not nearly so scrupulous.¹¹³ But as the debate in Congress neared an end in the fall of 1985, evidence began to surface that the administration was reconsidering its policy and that it was contemplating adopting a "broad" interpretation of the ABM Treaty that would justify more extensive testing than had been previously planned or disclosed. Not all members of Congress saw this as an untoward development; others, however, were appalled. Out of the ensuing controversy emerged an issue that would engage congressional attention off and on for the next several years.

(U) The incentives for the administration to adopt a broader reading of the treaty were several. First, it was clear that if and when the United States did decide to proceed with the deployment of space-based defenses, the ABM Treaty would have to be either renegotiated or scrapped altogether. This did not mean that progress in SDI research would automatically sound the funeral knell of the treaty, but it did suggest that the more deeply the United States became committed to SDI, the more unlikely it would become that necessary research and testing could be conducted in accordance with the treaty's restrictions. Not only did the 1972 treaty specifically prohibit efforts, beyond research, to "develop, test or deploy" space-based ballistic missile defenses involving then-existing ABM interceptor missiles, ABM launchers, or ABM radars; it also provided under Agreed Statement D for "specific limitations," subject to discussion, should either party choose

¹¹³ The most controversial Soviet action was the building of the Krasnoyarsk phased-array radar, which the State Department condemned as "a violation of legal obligations" under the 1972 ABM Treaty. See U.S. Dept. of State, "Soviet Noncompliance With Arms Control Agreements," Special Report No. 122 (Feb. 1, 1985): 5.

to create ABM systems "based on other physical principles," that is, technologies not used in the systems and components described and regulated in the treaty.¹¹⁴

(U) It was this provision, Agreed Statement D, around which the subsequent controversy revolved. The traditional, or "narrow," interpretation of the treaty, generally accepted in Congress and not previously challenged by any administration, was that Agreed Statement D effectively ruled out space-based or atmospheric testing of ballistic missile defense components "based on other physical principles." But as for a definition of what "testing" might comprise, or where research ended and testing began, the treaty was silent. A re-reading of what the treaty allowed, avoiding for the time being the sensitive issue of renegotiation, thus became one way of preparing Congress and the public for what lay ahead, while at the same time giving the program additional room to maneuver.

(U) A further reason for possibly enlarging on what the treaty allowed was to avoid future pitfalls such as those that SDIO had experienced in trying to defend its 1986 budget. Specifically, a more liberal reading of the treaty, opening the way for demonstration tests both in the atmosphere and outer space, would lift the burden of having to defend SDI as a purely research-oriented program and enlarge the scope of its activities, thereby making its budget requests more plausible to justify before Congress. As noted earlier, SDIO was well aware that many of its congressional supporters were growing impatient with what they considered the administration's reluctance to look beyond "research"; they thought the time had come for SDI to start producing concrete results. And as the debate over the 1986 budget demonstrated, proponents of SDI, especially in the House, found it tough to explain why, if SDI was a research program only, a budget of \$3 billion, more or less, was preferable to the reduced figures offered by critics. In short, unless SDI could demonstrate some potential contribution, the signs were increasingly clear that its credibility in Congress, especially among supporters, could seriously erode.

¹¹⁴ "Treaty Between the U.S.A. and U.S.S.R. on the Limitation of Anti-Ballistic Missile Systems," May 26, 1972, in U.S. Arms Control and Disarmament Agency, Arms Control and Disarmament Agreements: Texts and Histories of Negotiations (Washington, D.C.: G.P.O., 1982), 139-147.

(U) All in all, then, a reinterpretation of the ABM Treaty was an inviting prospect, though not one that the Reagan administration chose to seize on immediately. One of the earliest proposals in this regard came from two political scientists, Keith B. Payne and Rebecca V. Strobe, who in 1982 published an article urging stepped up R&D into space-based lasers for ballistic missile defense. Although the authors were aware of the treaty problems their proposal would raise, they insisted that there was enough leeway in the ABM Treaty to allow not only "laboratory development and testing," but "even deployment of a prototype laser R&D at a test range."¹¹⁵ Subsequently, in early 1985, the Heritage Foundation, a conservative think-tank in Washington with close ties both to the High Frontier organization and to the Reagan White House, circulated a paper drawing similar conclusions about the elasticity of the ABM Treaty.¹¹⁶ When queried by Congress on the matter, administration spokesmen consistently reaffirmed that all SDI research would be compatible with the ABM Treaty, a conclusion also affirmed in SDIO's 1985 report to Congress. "Specifically," the report stated, "our review has found that the research necessary to support a decision on the potential utility of the SDI technology can be conducted in accordance with U.S. Treaty obligations."¹¹⁷ But while appearing before the Senate Defense Appropriations Subcommittee in April 1985, Frank Gaffney from the Office of International Security Policy in the Office of the Secretary of Defense hinted that, while adhering to this position, the administration might also be considering a reinterpretation of the treaty. "We have very clear guidance from the President with respect to conducting this program within the ABM Treaty," Gaffney said. "What is substantially less clear of the ABM Treaty in particular is what all of its various limitations mean. There are numerous gray areas."¹¹⁸

¹¹⁵ Keith B. Payne and Rebecca V. Strobe, "Space-Based Laser BMD: Strategic Policy and the ABM Treaty," International Security Review 7 (Fall 1982): 269-288.

¹¹⁶ Raymond L. Garthoff, Policy Versus the Law: The Reinterpretation of the ABM Treaty (Washington, D.C.: Brookings Institution, 1987), 6-7.

¹¹⁷ SDIO, Report to the Congress on the Strategic Defense Initiative, 1985, p. B-1.

¹¹⁸ SCA, Hearings: 1986 DoD Budget, 33.

(U) Over the summer, while Reagan continued to insist that the United States would act on SDI in "full compliance" with its treaty obligations,¹¹⁹ rumors circulated on Capitol Hill that the administration was restudying the language and negotiating record of the 1972 ABM Treaty. As it turned out, the initiative to do so came from Richard Perle, Assistant Secretary of Defense for International Security Policy, who had asked an attorney in his office, Philip Kunsberg, to review the treaty and its history to determine whether expanded testing of SDI technologies might be possible. Kunsberg, who had little previous experience in arms control or international law, reported that in his opinion there was no solid evidence that the Soviet Union had ever unambiguously endorsed a narrow or restrictive interpretation of the ABM Treaty that would prohibit the kind of testing Perle had in mind. Rather, that interpretation was a unilateral American understanding and therefore not necessarily binding on the future actions of the United States. In other words, Kunsberg saw nothing in either the treaty itself or the negotiating record to rule out a broader range of tests, since research and development of technologies derived from "other physical principles" were not prohibited. Only deployment, Kunsberg concluded, was banned.¹²⁰ A review by the State Department's legal adviser, Judge Abraham D. Sofaer, reached an almost identical conclusion. Said Sofaer: "My study of the Treaty led me to conclude that its language is ambiguous and can more reasonably be read to support a broader interpretation."¹²¹

(U) On October 4, 1985, a policy-advisory committee to the President, the Senior Arms Control Policy Group (SACPG), met at the White House to review the opinions handed down by Kunsberg and Sofaer. According to Nitze's recollections of the meeting, the Defense Department, represented by Fred Ikle and Perle, pressed hard for adoption and recommendation to the President

¹¹⁹ See for example "Radio Address to the Nation on the Strategic Defense Initiative," July 13, 1985, Public Papers of the Presidents of the United States: Ronald Reagan, 1985 (Washington, D.C.: G.P.O., 1988), 917-919.

¹²⁰ Strobe Talbott, Master of the Game: Paul Nitze and the Nuclear Peace (New York: Knopf, 1988), 242-243; Garthoff, Policy Versus the Law, 7-9.

¹²¹ Sofaer testimony, Oct. 22, 1985, U.S. Congress, House, Committee on Foreign Affairs, Subcommittee on Arms Control, International Security and Science, Hearings: ABM Treaty Interpretation Dispute, 99:1 (Washington, D.C.: G.P.O., 1986), 4f. Also see Abraham D. Sofaer, "The ABM Treaty and the Strategic Defense Initiative," Harvard Law Review 99 (June 1986): 1972-1985.

of the "broad" interpretation in the lawyers' briefs. Taking the matter a step further, they also argued that even deployment--not just development and testing--of components derived from other physical principles might be permitted under the treaty. Although this so-called "broader than broad" interpretation apparently failed to catch on, the consensus of the discussion was that the treaty did appear to permit a wider range of testing than was previously assumed.¹²² But before the matter could be placed before the President, his national security adviser, Robert McFarlane, appearing on the television interview program "Meet the Press" on October 6, affirmed the administration's commitment to the new interpretation. As McFarlane explained it, the history and language of the ABM Treaty put no constraints on the development and testing of SDI technologies. "Only deployment is foreclosed," he said.¹²³

(U) Fearing adverse reactions from Capitol Hill as well as from U.S. allies, Nitze and Secretary of State Shultz persuaded Reagan not to act on the new interpretation of the treaty, even though it might be wholly valid, but to hold it in abeyance.¹²⁴ On October 12, in a radio talk devoted to defending SDI, the President confirmed that, for the time being, there would be no change of policy. "America's research and testing," he insisted, "is being conducted within the terms of the ABM treaty."¹²⁵ Two days later Shultz, speaking before the North Atlantic Assembly in San Francisco, added that while the Reagan administration deemed the broad interpretation to be "fully justified," it was now a "moot point" because "our SDI research program has been structured and . . . will continue to be conducted in accordance with a restrictive interpretation of the treaty's obligations."¹²⁶ But with the issue now out in the open it was destined to provoke controversy anyway.

¹²² Nitze, From Hiroshima to Glasnost, 413.

¹²³ "Mr. McFarlane's Interview on 'Meet the Press,'" Oct. 6, 1985, Department of State Bulletin 85 (Dec. 1985): 33.

¹²⁴ Nitze, From Hiroshima to Glasnost, 414.

¹²⁵ "Radio Address on Soviet Strategic Defense Programs," Oct. 12, 1985, Reagan Public Papers, 1985, 1240.

¹²⁶ "Arms Control, Strategic Stability, and Global Security," Oct. 14, 1985, Department of State Bulletin 85 (Dec. 1985): 23.

(U) Congressional reactions followed predictable lines, with liberals generally opposed to the new interpretation and conservatives in favor. On October 18, for example, three conservative Republican senators--Malcolm Wallop, Pete Wilson, and Dan Quayle--wrote Secretary of Defense Weinberger to express their disappointment with "the Administration's reaffirmation of the so-called restrictive policy." "We believe it is most important," they added, "that we go forward as quickly as possible not only with SDI research, but SDI testing and development. We are under the impression that our current restrictive policy, in fact, limits things that we can and should do to maximize the full potential of SDI in research, testing, and development."¹²⁷

(U) A few days later, on October 22, at a hurriedly called session of the House Foreign Affairs Subcommittee on Arms Control, liberals counterattacked. Democrat Stephen J. Solarz of New York, a persistent critic of SDI, labeled the administration's behavior "shameful and scandalous," especially for not broaching the reinterpretation first in private with the Soviets through the treaty-established Standing Consultative Committee. His colleague, Democrat Gerry Studds of Massachusetts, on the other hand, saw the whole issue as a diversion from the real problem--the administration's repudiation of arms control agreements. "Once you begin arguing the fine points of the text," he said, "you have in a sense conceded the administration's point." About the only panel member willing to go on record as favoring the reinterpretation was Republican Henry Hyde of Illinois. A long-time skeptic of the ABM Treaty, Hyde saw the administration's initiative as a refreshing break in view of past Soviet encroachments on the treaty's terms. "I find it fascinating," he observed, "that this treaty is being held up as sacred scripture when the spirit of it has been violated [by the Soviets]." But despite considerable criticism of the administration's recent actions, subcommittee chairman Dante B. Fascell (D., Fla.) denied that he and like-minded colleagues were trying to scuttle SDI. "By reaffirming the 13-year-old interpretation of the ABM Treaty," he cautioned, "I have had no intention of undermining the SDI program. The fact that we raise

¹²⁷ Ltr, Wallop, Wilson, and Quayle to Weinberger, Oct. 18, 1985, SDIO External Affairs Records, Congressional Correspondence file.

questions about current administration policy should not be interpreted as an attempt to sabotage SDI."¹²⁸

(U) Although members of Congress continued to exchange views on the proper interpretation of the treaty through the end of the session, the administration's decision to defer action on a new policy effectively stifled the opposition for the time being. "As a matter of policy," Perle told the Senate Armed Services Committee, "the President has indicated that we will respect the narrow and wrong interpretation of the Treaty because our program has been configured with that interpretation in mind."¹²⁹ Emphasis added. But instead of being settled, the issue was only left dangling. Later it would reemerge not only as a point of contention between Congress and the administration but as a source of fundamental disagreement in U.S.-Soviet relations as well.

(U) By the time the first session of the Ninety-ninth Congress ended, it was increasingly evident that the political controversy surrounding SDI would have a profound bearing on the program's future. As yet, SDI had shown few concrete technical results, making support of the program largely an act of faith. Whether the technologies under study would ever work as planned, providing the multi-layered space-based defense system that the Fletcher panel had projected, was to a considerable degree a matter of conjecture. In these circumstances, congressional critics had little trouble raising questions about the program, including not only its feasibility but also its ultimate purpose. Looming ahead was the especially ticklish problem of what to do about the ABM Treaty. But for the time being SDI continued to enjoy a generally favorable standing on Capitol Hill, as best indicated by congressional action on SDIO's FY 1986 budget. Though not as much as the President had requested, it was nearly double the previous year's appropriation, a clear sign that most in Congress stood behind the program. Whether that support would continue, however, remained to be seen.

¹²⁸ House, Committee on Foreign Affairs, Subcommittee on Arms Control, International Security and Science, Hearings: ABM Treaty Interpretation Dispute, 36, 43-45 and *passim*.

¹²⁹ Perle testimony, Nov. 6, 1985, U.S. Senate, Committee on Armed Services, Subcommittee on Strategic and Theater Nuclear Forces, Stenographic Transcript of Hearings to Continue Testimony on SDI Policy and Technology Objectives, 99:1 (Xerox copy in SDIO External Affairs), 14.

CHAPTER V

SDI UNDER ATTACK (1986)

(U) As Ronald Reagan entered his sixth year in the presidency, he seemed as dedicated as ever to the policies and programs of his original agenda. Restoration of a strong defense posture remained paramount. In his state of the union message, delivered on February 4, 1986, he reaffirmed that: "Keeping America strong is as vital to the national security as controlling Federal spending is to our economic security." Integral to this process, he added, was continued progress on SDI. "A security shield can one day render nuclear weapons obsolete," he insisted, "and free mankind from the prison of nuclear terror. America met one historic challenge and went to the Moon. Now America must meet another: to make our strategic defense real for all the citizens of the planet Earth."¹

(U) Although many in Congress still shared the President's vision, there were increasing signs over the course of 1986 that congressional enthusiasm for SDI had peaked and that it was now starting to decline. With the Federal deficit setting new records each year, many in Congress wondered whether added spending for big-ticket items like SDI was absolutely necessary. And since 1986 was an election year, Congress could be expected to give SDI even closer scrutiny than usual. With all of the House and a third of the Senate up for election at the end of the year, members of Congress, particularly those who preferred the middle-of-the-road, hesitated to take positions on controversial issues that might cost them votes. And SDI, despite its continuing favorable rating in public opinion polls, was one of those issues. Moreover, as the previous year's debate over the FY 1986 budget had demonstrated, congressional opponents of SDI were strong and well organized, and had close contacts among powerful and influential anti-SDI lobbying groups. Although congressional

¹ "Address Before a Joint Session of Congress on the State of the Union," Feb. 4, 1986, Public Papers of the Presidents of the United States: Ronald Reagan, 1986 (Washington, D.C.: G.P.O., 1988), 127, 129. Hereafter cited as Reagan Public Papers, 1986.

proponents of SDI were equally determined, with outside allies of their own, they seemed less effective in conveying their message, perhaps because most were conservatives dealing with a generally more liberal news media which paid them less attention and tended to be skeptical of SDI. In any case, while SDI may have been in no immediate peril, its future was by no means wholly secure either.

The President's FY 1987 Budget and Its Prospects

(U) During 1986, as during the two preceding years, congressional attention centered on SDI's budget. On February 5, 1986, President Reagan submitted his spending proposals for FY 1987, including a request for new budget authority for defense totaling \$311.6 billion, an increase of 12 percent in nominal terms and a real increase, after inflation, of 8 percent over the previous year's appropriation.² For the Strategic Defense Initiative the President requested just over \$4.8 billion, representing about 11.5 percent of all defense-wide RDT&E and a 74 percent increase over the FY 1986 appropriation. Despite the large increase, which one Democratic senator dismissed as "outlandish,"³ the request was fully in line with what SDIO had projected the year before (see Chapter IV). For FY 1988 SDIO estimated that it would need additional funding of \$5.463 billion.⁴ Not only did SDI now overshadow all other military R&D; it was also the single largest program in the DoD budget, making up 1.5 percent of the Pentagon's total request.⁵ Reports in the press noted further that in his annual "Defense Guidance" paper to the military services for the next five years,

² U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorizations for Appropriations for Fiscal Year 1987, Part 1, U.S. Military Posture, 99:2 (Washington, D.C.: G.P.O., 1986), 15; U.S. Congress, Senate, Committee on Appropriations, Special Hearings: Budget Overview FY 1987, 99:2 (Washington, D.C.: G.P.O., 1986), 2.

³ See comments by Sen. Albert Gore (D., Tenn.), Congressional Record, Aug. 4, 1986: S 10262.

⁴ U.S. Strategic Defense Initiative Organization, Report to the Congress on the Strategic Defense Initiative, 1986 (June 1986), p. VIII-6.

⁵ U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1987, Part 2, 99:2 (Washington, D.C.: G.P.O., 1986), 1.

FIGURE V-1
BREAKDOWN OF SDIO BUDGET REQUEST
FOR FY 1987
(\$ in millions)

Program Element	FY86 Approp.	FY87 Request
SATKA	\$ 857	\$1,263
DEW	844	1,615
KEW	596	991
SC/BM/C3	227	462
SLKT	222	454
Program Management	13	17
TOTALS	\$ 2,759	\$4,802

Source: U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1987, 99:2 (Washington, D.C.: G.P.O., 1987), 1628.

Secretary of Defense Weinberger had upgraded SDI to the "highest priority," placing it on a par with the PEACEKEEPER (MX) missile, the B-1 bomber, and improvements in command, control, and communications facilities for nuclear warfighting purposes.⁶

(U) From the moment it reached Capitol Hill the President's 1987 budget, including its proposed spending on SDI, was the subject of much controversy and criticism. Labeling the proposed 8 percent DoD increase excessive and "unacceptable," Les Aspin (D., Wis.), chairman of the House Armed Services Committee, predicted that large-scale reductions would be unavoidable.⁷ As one of his House colleagues phrased it, "defense [spending] is going to be squeezed down, and we are going to have a lot less money available than we hope."⁸ According to Ted Stevens (R., Alaska), chairman of the Senate Defense Appropriations Subcommittee, reductions affecting SDI would probably fall somewhere between 20 and 25 percent merely as a result of the paring associated with the congressional budget process. Stevens' prediction, as it turned out, would be almost exactly on the mark.⁹

(U) In an effort to assess the prospective impact that any reductions from the President's request would have on the strategic defense program, the House and Senate Appropriations Committees asked SDIO to submit, along with its regular budget, its estimate of a "minimum funding level" that would be required to sustain existing SDI programs at their current rate. This turned out to be \$4.1 billion, which SDIO claimed would continue contracts begun in Fiscal Years 1985 and 1986; however, the minimum funding level would not allow for new contracts, capitalize on emerging technologies, or build on prior year efforts. As a matter of policy and self-interest, SDIO did not

⁶ "Missile Shield Program Gets Pentagon's Highest Priority," New York Times, Jan. 29, 1986, p. A11.

⁷ New York Times, Feb. 5, 1986: A1.

⁸ U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations For 1987, Pt. 5, 99:2 (Washington, D.C.: G.P.O., 1986), 594.

⁹ SCA, Hearings: DoD Appropriations for FY 1987, Pt. 2, 46.

endorse this minimum funding level as an alternative to the President's submission, but merely provided it for the committees' interest and edification.¹⁰

(U) SDIO's budget for FY 1987 was its first scheduled to be reviewed by Congress under the stiffened spending rules of the Gramm-Rudman-Hollings Balanced Budget and Emergency Deficit Control Act of 1985. Under the new law Congress clearly committed itself to reducing the Federal deficit by mandating automatic spending cuts which over time were supposed to yield a balanced budget. According to computations made by the Office of Management and Budget, whose estimates were the law's official guidelines, the President's budget for FY 1987 would result in a deficit of \$143.6 billion under the Gramm-Rudman-Hollings target of \$144 billion, with part of the deficit offset presumably falling on SDI.¹¹ But on March 1, 1986, in the law's first round of sequestration of funds affecting FY 1986 appropriations, Secretary of Defense Weinberger elected to exercise his option to exempt SDI, thereby avoiding automatic spending cuts.¹² That he would do so again when the FY 1987 budget became law seemed almost certain. Thus, whatever reductions the program might experience were likely to be those directed by Congress in the authorization and appropriation process. Knowing that the administration would give SDI special treatment, SDIO Director Abrahamson worried that some in Congress, especially those who sat on the armed services and appropriations committees, would be inclined to give SDIO's budget closer scrutiny, with an eye toward greater savings, than might otherwise have been the case.¹³ In other words, the administration's immediate efforts to protect the program may well have damaged its long-term prospects.

(U) This was also SDIO's third budget submission, marking the midway point in the program's original five-year blueprint as set forth in the 1983 Fletcher Panel report. But because Congress had pared about 25 percent from the program's two previous budget requests, it was

¹⁰ See HCA, Hearings: DoD Appropriations for FY 1987, Pt. 5, 589-590.

¹¹ SCA, Budget Overview Hearings, 2.

¹² SCA, Hearings: DoD Appropriations FY 1987, Pt. 2, 48.

¹³ Author's telephone interview with Abrahamson, June 30, 1991.

increasingly apparent that SDIO faced a situation in which it might have to make some arbitrary decisions concerning those technologies to pursue and those to abandon or cut back. Clearly, the earlier approach recommended by the Fletcher Panel and initially pursued by SDIO of supporting across-the-board research into a wide array of promising technologies was no longer, in Abrahamson's estimation, practicable.¹⁴ Nonetheless, he and his staff were still confident of meeting their basic goal. "Although we now have to accept higher risks and more austere research," Abrahamson said in his second annual report,

we still seek to provide the basis for informed decisions in the early 1990s on whether or not to develop and later deploy a defense of the United States and its Allies against ballistic missiles. The mission of the SDIO is to provide the widest set of technical options that time and the resources allocated will permit. We seek the technology that can support a decision to pursue defensive options that would provide an effective defense of critical assets, of our nation and our Allies. But most importantly we seek to lessen the possibility of nuclear war.¹⁵

(U) As this broadly stated description of SDI's ambitions suggested, the Defense Department was eager to lay to rest the controversy that had dogged the program over the previous two years about its ultimate aims. Indeed, the image that SDIO preferred to project was one of a program well along toward realizing its objective of providing the basis for an informed decision on deployment of an effective system of nationwide protection against ballistic missile attack. "We are nearly there," Abrahamson told the American Defense Preparedness Association in February 1986. "There is no longer a question of if. It is a question of how long and how expensive."¹⁶ Writing the following month to members of Congress, Abrahamson, without offering any details, boasted of "remarkable technical accomplishments of the last year" and "real progress in the examination of

¹⁴ Abrahamson testimony, May 1, 1986, U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1987, Part 5, 99:2 (Washington, D.C.: G.P.O., 1986), 595.

¹⁵ SDIO, Report to Congress, 1986, p. II-3.

¹⁶ Quoted in SCA, Hearings: DoD Appropriations for FY 1987, Pt. 2, 30.

technologies that could support a potential defense against ballistic missiles."¹⁷ All in all, it was a glowing picture of progress.

(U) Such confidence may have seemed justified from Abrahamson's standpoint, but it struck others, including some in the congressional bureaucracy, as misleading and ill-founded. According to a well publicized report issued in the fall of 1985 by the Office of Technology Assessment (OTA), which answered directly to Congress, research into strategic defenses had yet to yield any significant revelations that would shift the current advantage from offensive to defensive weaponry. "Unless this imbalance between the offense and defense disappears," the report concluded,

strategic defense might be plausible for limited purposes, such as defense of ICBM silos or complication of enemy attack plans, but not for the more ambitious goal of assuring the survival of U.S. society. . . . While it is certainly possible that defensive technological development could outpace the development of offensive weapons and countermeasures to defenses, this does not appear very likely.¹⁸

(U) The scientific community, though never overly supportive of the President's "vision" to begin with, was likewise increasingly skeptical that SDI would produce a workable, effective system of defenses. According to a survey conducted by the Cornell Institute for Social and Economic Research, members of the National Academy of Science with backgrounds in physics, mathematics, and other fields relevant to missile defense work, overwhelmingly doubted that a survivable, cost-effective system of protection could be built within the next 25 years. Of those participating in the poll, 78 percent said the prospects were either "extremely poor" or "poor," while only 4 percent said the odds of success were better than even.¹⁹ The Union of Concerned Scientists did a similar poll among members of the American Physical Society, the major professional organization for physicists. The results showed that two-thirds of those surveyed found it improbable or unlikely

¹⁷ Ltr, Abrahamson to Sen. Dale Bumpers, et. al., Mar. 11, 1986, SDIO External Affairs, Congressional Correspondence file.

¹⁸ U.S. Office of Technology Assessment, Ballistic Missile Defense Technologies (Washington, D.C.: G.P.O., Sept. 1985), 32-33.

¹⁹ "Doubt Cast on Missile Shield," New York Times, Oct. 31, 1986: A36.

that an anti-missile defense system would protect American cities from Soviet nuclear attack. However, they did agree, echoing the findings of the OTA report, that defense of hardened military targets might be feasible.²⁰

(U) Opinion in Congress tended to reflect this growing mood of skepticism. Indeed, as 1986 progressed, it became increasingly obvious that few members of Congress seriously believed, as President Reagan apparently still did, that a nearly impenetrable system of ballistic missile defense--one capable of rendering ballistic missiles "impotent and obsolete"--was technologically within reach in the foreseeable future. "I believe," said Sen. Ernest Hollings (D., S.C.), a supporter of SDI, "[that] the distinguished President overspoke on its capabilities."²¹ Another indicator was Congress's unhappiness with the Defense Department's apparent intention to ignore or evade congressionally mandated restrictions on SDI, beginning with circumvention of an amendment to the FY 1986 authorization bill requiring administration adherence to the so-called "Nitze criteria" that any deployment of strategic defenses be survivable and "cost-effective at the margin." Though the law failed to elaborate on what these terms meant, let alone how they were to be applied, there was strong bipartisan sentiment on Capitol Hill that the administration should make every effort to comply.

(U) Defense Department representatives, on the other hand, seemed indifferent, if not oblivious, to these congressional concerns. While appearing before the Senate Armed Services Committee in March, Assistant Secretary of Defense Richard Perle hinted that the administration might not necessarily be bound by the Nitze criteria in assessing deployment options. Rather, the test would be whether a defensive network could be achieved "with reasonable budgets and in a manner that will produce stability."²² Subsequently, in an interview with the New York Times, Abrahamson introduced the concept that SDI simply be "affordable." Cost alone would not be the

²⁰ Alan Sweedler, "Congress and the Strategic Defense Initiative," in Gerald M. Steinberg (ed.), Lost in Space: The Domestic Politics of the Strategic Defense Initiative (Lexington, Mass.: D.C. Heath, 1988), 77.

²¹ Congressional Record, Aug. 5, 1986: S 10340.

²² SCAS, Hearings: FY 1987 Authorization, Pt. 4, 1635.

deciding factor, but only one of several. Thus, while "some of the initial investment" might appear high, Abrahamson said, the ultimate objective of a deployed system could still be met if the resulting gains to the national security appeared to justify the investment. And he added, defending this approach, "the reason that many people, including us, were worried about cost-effectiveness at the margin is for the fundamental principle: we are trying to get the Russians to modify their behavior."²³ But Democratic Representative Lee Hamilton of Indiana, a senior member of the House Foreign Affairs Committee, found this statement by Abrahamson a disturbing departure from congressionally-directed guidelines and wanted a clarification of policy. From all outward appearances, Hamilton believed, the administration was trying to find ways to avoid complying with what Congress had directed.²⁴

(U) Adding to the controversy were allegations that the Reagan administration was routinely handing out purposefully misleading information on SDI. In March 1986 Aviation Week & Space Technology published an article claiming that the Defense Department and the CIA had an ongoing "disinformation program" involving SDI and up to 20 other military projects. Though the ostensible purpose of the program was to impede the transfer of technical data to the Soviet Union, a significant side-effect, the report suggested, was to pass along misinformation to Congress and the American public.²⁵

(U) These development not only cast doubt on the Defense Department's veracity; they also fueled rumors that Abrahamson himself was losing credibility. Even among senior administration officials, at the State Department and elsewhere, there were suspicions that Abrahamson was not being wholly candid about SDI's progress and that the accomplishments he claimed were over-rated, perhaps even illusory. Recalling the numerous briefings he had attended, arms control advisor Paul

²³ "Chief of Missile Defense Project Seeks to Reshape Policy on Costs," New York Times, May 1, 1986: A20.

²⁴ See Ltr, Hamilton to Weinberger, Sep. 16, 1986; ltr, Hamilton to Abrahamson, Sep. 25, 1986; and memo, Abrahamson for SecDef, Nov. 26, 1986, sub: Correspondence from Congressman Lee Hamilton, all in SDIO Director's chron. files.

²⁵ David M. North, "U.S. Using Disinformation Policy To Impede Technical Data Flow," Aviation Week & Space Technology, Mar. 17, 1986: 16.

H. Nitze thought that Abrahamson never was able to make a "cogent case" for SDI based on ongoing research. "You'd listen to him once and you'd listen to him again and he'd never say the same thing," Nitze recalled. "There was no continuity to his spiel. I thought he was the best 'snow' artist in the world. After you listened to him for awhile you were sure it was a snow job he was giving you."²⁶ However, others who had attended Abrahamson's presentations held a more favorable opinion. According to Rep. George Brown, Jr. (D., Calif.), a persistent critic of SDI: "I never got the impression he was in any way, shape or form trying to push [SDI] beyond its limits, but that he was trying to give Congress a realistic view as to what the program could do and that he had reasonable hopes for it."²⁷

(U) To test their suspicions that SDI was being oversold, three prominent critics--William Proxmire (D., Wis.), J. Bennett Johnston (D., La.), and Lawton Chiles (D., Fla.)--all members of the Senate Defense Appropriations Subcommittee, directed members of their staff to conduct an indepth review of SDI. Relying on briefings arranged by SDIO and interviews with scientists and engineers at the country's major weapons research labs, the investigators found that while "some significant progress has been achieved . . . none of it could be described as 'amazing.'" On the contrary, the investigation concluded that

the "schedule-driven" nature of the current research program, which requires that a development decision be made by the early 1990's, has aroused significant concern among scientists at the national weapons laboratories. The concern is twofold. First, promising long-term research will be compromised to reach an arbitrary schedule. Second, in an effort to maintain public support for high funding levels and an early development decision, SDI experiments will degenerate, in the words of a senior scientist at the Livermore National Laboratory, into "a series of sleazy stunts."²⁸

²⁶ Author's interview with Amb. Paul H. Nitze, July 16, 1990.

²⁷ Author's interview with Rep. George Brown, Mar. 12, 1990.

²⁸ Douglas Waller, James Bruce, and Douglas Cook, "SDI: Progress and Challenges" (Staff report submitted to Senators William Proxmire, J. Bennett Johnston, and Lawton Chiles, Mar. 17, 1986), 1.

(U) The report also claimed that while SDIO had slowed the pace of its research, congressional budget cuts were not, for the most part, to blame. Rather, the reasons were, first and foremost, the lack of technical promise in some research areas (e.g., chemical lasers) and, second, SDIO's recognition that keeping to an "unrealistic" research schedule was a mistake.²⁹ In addition, the report disputed the administration's contention that SDI research had yielded sufficient technical data so that an informed decision could be made on whether to proceed with development and deployment. "Contrary to claims by Administration officials and SDI's top leadership," the report found,

the program's scientists and military planners across the country have not concluded that SDI is militarily and economically feasible. They presently have little idea whether it is. The fact is, they are still assembling the research to ask and answer the right questions.³⁰ Emphasis in original.

(U) Not surprisingly, SDIO took strong exception to the report's findings, labeling them "superficial" and technically flawed. In a point-by-point rebuttal released to the press, SDIO suggested that the authors had made no attempt to reach an even-handed, objective assessment, but had instead intentionally built their argument around "negative comments" from disgruntled employees.³¹ Proxmire, who had been the inspiration behind doing the study in the first place, as much as admitted that the authors were indeed biased. "Obviously, we're critics of SDI," he said. "It's no more balanced than their testimony before the committee has been."³² From this point on, relations between Proxmire's office and SDIO would verge on open warfare.

²⁹ *Ibid*, 2.

³⁰ *Ibid*, 22-23.

³¹ See "Response to Congressional Staff Report 'SDI: Progress and Challenges,' undated, attach. to memo, Abrahamson for SecDef, [ca. Apr. 1986], sub: Sen. Proxmire's Report, SDIO Director's chron. files.

³² Quoted in "SDI Research Yields No Breakthroughs," Washington Post, Mar. 30, 1986: A17.

(U) Still, despite growing doubts, Congress was not yet prepared to end the SDI program. Supporters, like Senator Hollings, remained convinced that spending money on it served a real need, first, as a hedge against a Soviet ABM "breakout," and second, to maintain future options. What was keeping the program going politically, according to Sen. Warren Rudman (R., N.H.), was an informal consensus in Congress that SDI still deserved the benefit of the doubt. "I do not think anyone in the Congress," he insisted, "is qualified to say it will not work or it cannot work or it will cost too much. Maybe we can say that next year or the year after. I certainly hope the program gets a good deal of support over the next year or two so that at least we know that much."³³

SDI and Arms Control

(U) Next to the budgetary and technical questions raised by SDI, it was the program's strategic impact, particularly as it might affect ongoing arms control talks, that elicited the most congressional concern and comment during 1986. Part of the reason, to be sure, was the popular political appeal of arms control among voters, and with an election coming up at the end of the year, members of Congress were generally eager to demonstrate their interest in and support for prudent and effective arms control measures. But over and above these political realities were questions of fundamental policy, including the way SDI was likely to affect the future of the ABM Treaty and whether SDI was actually helping or hurting chances for an arms control agreement with the Soviet Union on offensive strategic weapons.

(U) In seeking answers to these questions members of Congress, including critics and supporters of SDI alike, were occasionally frustrated--even irritated--by the administration's refusal, on grounds of "executive privilege," to allow them access to pertinent documentation. The main issue was the administration's so-called "broad" interpretation of the ABM Treaty, adopted the previous fall but not yet implemented, to allow more flexible SDI testing (see Chapter IV). Skeptics, led by Senators Robert Byrd (D., W. Va.) and Sam Nunn (D., Ga.), the ranking minority member on

³³ SCA, Hearings: DoD Appropriations for FY 1987, Pt. 2, 40.

the Senate Armed Services Committee, had petitioned to see both the 1971-72 SALT I negotiating record on which administration officials said they had based that interpretation, and a 1985 classified study by two outside consultants (both former participants in the SALT I talks) that reportedly contradicted the administration's findings.³⁴ According to Byrd, the administration's refusal to release these records posed a threat to "the Senate's constitutional role as a coequal in the treaty process." Despite repeated efforts by both sides to find a compromise, and veiled threats from Byrd and other senators that they might seek an unspecified "legislative remedy," the impasse continued for most of the year.³⁵

(U) In fact, debate over what the ABM Treaty did and did not preclude was relatively muted during 1986 since, as all but the most die-hard critics conceded, SDI testing posed no immediate challenge to the treaty, no matter how one read it. Moreover, President Reagan's decision the previous fall to continue to abide by the traditionally accepted "narrow" interpretation (even though he and his advisors considered it incorrect) effectively preempted the issue for the time being. The only reason the President might change his position, warned the Arms Control and Disarmament Agency, would be if Congress failed to provide adequate support for SDI research.³⁶ Though SDIO did have experiments planned that would pose problems under the narrow interpretation, those tests were still several years in the future and, insofar as can be ascertained, had not yet come to the attention of Congress.

(U) The more immediate congressional interest centered on the U.S.-Soviet negotiations in Geneva and the role of SDI in those talks. Heretofore, critics of SDI, both in and out of Congress, had accused the administration of using SDI as a means of avoiding serious negotiations with the Soviets. By launching an across-the-board strategic buildup and by proceeding with SDI, critics

³⁴ For the background of the dispute, see "A Tug-of-War Erupts on Missile Treaty Data," New York Times, July 15, 1986: A20. The consultants' study was: Charles L. Fitzgerald and Sidney Graybeal, SALT I Negotiating History Relating to Limitations on Future ABM Systems and Components Based on "Other Physical Principles" (Arlington, Va.: System Planning Corporation, March 1985).

³⁵ Congressional Record, Aug. 4, 1986: S 10226.

³⁶ "ABM Pact Tied to Budget Cuts for 'Star Wars,'" New York Times, May 19, 1986: A1, A7.

argued, the Reagan administration was trying either to force the Soviets into an expensive arms race that would eventually bankrupt them, or, alternatively, retrieve the strategic superiority that the United States had enjoyed in the 1950s and 1960s. But with the unexpected resumption of arms talks in 1985, these same critics found themselves in the awkward position of arguing against defense programs, including SDI, that appeared responsible to one degree or another for bringing the Soviets back to the negotiations.³⁷

(U) The Soviets themselves readily acknowledged that imposing restraints on SDI was one of their top priorities at Geneva. On January 15, 1986, in a major diplomatic and public relations move, they offered a proposal for the phased elimination of all strategic and theater nuclear weapons by the end of 1999, a process that could take place, however, "only if both the USSR and the USA renounce the development, testing and deployment of space-strike [i.e., SDI-type] weapons."³⁸ Although the Soviets subsequently softened their demands for curbs on SDI, it was clear that, from the Soviet perspective, progress in controlling and reducing offensive strategic weapons had to go hand in hand with limitations on SDI.

(U) The American position was quite different. While Reagan endorsed cuts of up to 50 percent in offensive strategic weapons, he announced in late May 1986, following release of another report citing a long record of Soviet non-compliance with arms control agreements, that the United States would no longer be bound by the ceilings set under the unratified 1979 SALT II Treaty.³⁹ This seemed to signal that while the United States would go through the motions of negotiating cuts in offensive strategic arms, its buildup of such weapons, along with work on SDI, would go on unimpeded. Liberal critics accused the administration of cynical abuse of arms control and of seeking cuts in offensive weapons in order to make SDI more credible and effective. Senator Proxmire went even further, charging that the administration's action with respect to SALT II was

³⁷ See Sanford Lakoff and Herbert F. York, A Shield in Space? Technology, Politics, and the Strategic Defense Initiative (Berkeley: University of California Press, 1989), 176-177.

³⁸ "Statement by Mikhail Gorbachev," [Jan. 15, 1986], Arms Control Reporter, 1986: sec. 611.D, p. 53.

³⁹ *Ibid*: sec. 607.B, p. 94.

tantamount to killing arms control. As far as Proxmire was concerned, "There is literally nothing left."⁴⁰

(U) At the same time, Reagan said he steadfastly opposed using SDI for bargaining purposes. By taking such a stand Reagan was not only trying to protect SDI; he was also attempting to settle a growing schism between Secretary of State George P. Shultz, on the one hand, who would not rule out a deal involving SDI, including even a ten-year moratorium on SDI testing; and Secretary of Defense Caspar Weinberger, who opposed any negotiated constraints on SDI because they might jeopardize the program's chances in Congress. The Soviets, Weinberger said, "know you can't get funding for a program if you've said you're not going to use it for 10 years."⁴¹ Reagan concurred. SDI, he believed, was too important to be abandoned as a negotiating ploy. "We won't bargain away SDI," he told a White House gathering of SDI supporters, "because it is a promising area of technology that could release the world from the threat of nuclear ballistic missiles. We must continue our SDI program on schedule."⁴²

(U) As reassuring to SDI's supporters as Reagan's remarks were meant to be, it was really unclear where he stood. On the surface, his repeated statements that he would never bargain SDI away, but would instead see it through to the end, seemed to indicate that he was prepared to pursue a unilateral policy on SDI, up to and including possible deployment. But with the complicating factor of the ABM Treaty to consider, Reagan sometimes appeared to hedge, conceding that SDI could not be kept out of the negotiations. "To go forward with a deployment without a lot of further meetings and exchanges [with the Soviet Union]," he acknowledged, "would then appear that we might be seeking to get a first-strike advantage."⁴³ In other words, even if an effective SDI system could be developed, it did not necessarily follow that it would be deployed.

⁴⁰ Congressional Record, Aug. 4, 1986: S 10224.

⁴¹ Quoted in Sweedler, "Congress and SDI," 76.

⁴² "Remarks at a White House Briefing...", July 29, 1986, Reagan Public Papers, 1986, 1019.

⁴³ "Interview With Representatives of the Baltimore Sun," Mar. 12, 1986, *ibid*, 331.

(U) Reagan's apparent ambivalence on SDI deployment, coupled with his continued adherence to the narrow ABM Treaty interpretation, left SDI's congressional supporters with a difficult problem. Either they could lobby for withdrawal from or amendment of the ABM Treaty--a stand not without political risk--or they could press for measures that would gradually wean the United States from the treaty's restrictive provisions. Some, like Sen. Dan Quayle (R., Ind.), wanted Reagan to step up work on tactical ballistic missile defenses as a prod to near-term deployment of SDI technologies, while others--notably Rep. Jack Kemp (R., N.Y.) and Sen. Malcolm Wallop (R., Wyo.)--urged the President to exercise his option under the ABM Treaty to deploy a limited ground-based ballistic missile defense as a first step.⁴⁴ In furtherance of their goal, Wallop and Kemp also co-sponsored a bill to create a separate military department of strategic defenses, co-equal with the other services. But with the administration and congressional leaders at best lukewarm toward the proposal, it never got out of committee.⁴⁵

(U) Within the administration opinions on SDI's future were also divided, adding further to the confusion on Capitol Hill. One group, headed by Perle and a handful of others in the Defense Department, favored reorienting the SDI program toward "the defense of America's capacity to retaliate."⁴⁶ But by and large the administration shunned such suggestions, preferring instead to work on perfecting technologies that would fulfill the President's original concept of nationwide protection against ballistic missiles. "Maybe it's his [Perle's] view," Nitze observed, "but I can't see the rationale for it."⁴⁷ Weinberger, who often quarreled with Nitze, this time found himself in agreement. "There were a lot of supporters of SDI who wanted to build something," he recalled. "But the only thing you could deploy under the ABM Treaty was the ground-based point defense

⁴⁴ Malcolm Wallop and Jack Kemp, "Perils of Deferring S.D.I.," New York Times, Aug. 12, 1986: A25; Dan Quayle, "Begin to Deploy Incremental SDI Where Possible," Wall Street Journal, Oct. 2, 1986: 30.

⁴⁵ Author's interview with Wallop, June 6, 1990.

⁴⁶ Time, June 23, 1986: 16.

⁴⁷ *Ibid.*

that would defend missile sites. And that, I thought, would use up the money and the public support."⁴⁸

(U) What remained to be seen was whether members of Congress could be persuaded to continue their support of SDI if they thought that nothing was likely ever to materialize or, alternatively, that the ultimate purpose of SDI was to produce something that could later be bargained away. It was one thing for Congress to appropriate funds for basic research on a program that stood a good chance of coming to fruition someday; but it was quite another to vote large amounts of money on an effort that might never be tested or deployed. Even though Reagan repeatedly denied that any deal would be made involving SDI, he also said that he needed SDI as negotiating leverage with the Soviets. Many in Congress were understandably confused. As Rep. Edward J. Markey (D., Mass.), a long-standing critic of SDI, characterized the situation: "Star Wars has now become the ultimate oxymoron: a non-negotiable bargaining chip."⁴⁹ And with the United States no longer bound to the SALT II Treaty limits on offensive strategic weapons, liberal opponents of SDI made known that they would try to curb SDI in retaliation. As Democratic Representative Norman Dicks of Washington put it: "If they are going to sack arms control, it will cost them on SDI."⁵⁰

The Revolt in the Senate

(U) The most dramatic and far-reaching development during the congressional review of SDIO's FY 1987 budget request was a sharp falling-off of support for the program in the Senate. Heretofore it had been the Democratic-controlled House that had dealt the administration the most trouble and opposition to SDI. Accordingly, the administration had looked to the Senate to counterbalance the House. But by 1986 erosion of support for SDI was under way in the Senate as

⁴⁸ Author's interview with Weinberger, June 13, 1990.

⁴⁹ Edward J. Markey, "The Packaging and Sale of 'Star Wars,'" Christian Science Monitor, Nov. 20 1986.

⁵⁰ Quoted June 3, 1986, in Arms Control Reporter, 1986: sec 607.B, p. 95.

well, Republican control of that body notwithstanding. The result was a budget not only much smaller than the administration had hoped for and expected, but also one that imposed more constraints on the program than ever before.

(U) The earliest sign that a revolt against SDI was brewing in the Senate was the appearance of a letter in late May signed by 46 senators (37 Democrats and 9 Republicans) urging the Armed Services Committee, which was then wrapping up its hearings, to limit after-inflation growth in the SDI authorization to no more than 3 percent. Though the senators insisted that they favored a "vigorous ballistic missile defense research program . . . as a hedge against Soviet breakout from the ABM Treaty," they believed also that SDI "has received excessive and inappropriate emphasis in DOD's budget" and that it was "being rushed to a premature development decision in the early 1990s in order to meet an unrealistic schedule." One consequence of the alleged over-emphasis on SDI, the senators believed, was that it was beginning to "impinge on other military research and development" and thus divert energy and resources from solving other critical defense problems.⁵¹

(U) As the language of the letter indicated, its drafters and promoters were the same senators--Proxmire, Johnston, and Chiles, with the help of Republican John Chafee of Rhode Island--who had sponsored the staff study on SDI released two months earlier. Although the precise impact of such letters is difficult to measure, as a test of general sentiment they tend to be fairly reliable indicators. In this case, what the letter revealed was a distinct discontent over SDI that had not existed (or that had not surfaced) a year earlier. According to Johnston, had he had more time before the Memorial Day recess, he could have rounded up as many as 51 signatures.⁵² Whether all would have voted accordingly, though, is a matter of conjecture.

(U) The gathering revolt in the Senate took on more distinct form with the release on July 8 of the Armed Services Committee's authorization report. By a 10-9 vote the committee rejected a Republican motion to fund SDI at a level of \$4.05 billion (about the same as SDIO's estimated "minimum funding level") and recommended an authorization of just under \$3.6 billion, a 28 percent

⁵¹ Ltr to Sens. Goldwater and Nunn, May 22, 1986, quoted in Sweedler, "Congress and SDI," 79-80.

⁵² Washington Post, May 23, 1986: A25-A26.

real increase from the year before but still \$1.2 billion less than the administration's request. How the committee arrived at this figure is not exactly clear, but it was apparently a product of the usual horse trading on Capitol Hill, an effort to meet halfway the complaints of those, mainly Democrats, who thought SDI should be limited to 3 percent real growth, and Republicans who favored a higher figure.⁵³ The architects of the compromise were Senators Sam Nunn, the committee's ranking Democrat, and William S. Cohen of Maine, who broke ranks with his fellow Republicans on the committee to vote the reduction. As part of the compromise, the committee recommended that \$453 million originally requested for SDI be transferred to what it termed a "balanced technology initiative" for research into enhanced conventional weaponry.⁵⁴ "The S.D.I. program is bleeding funds from other research and development programs," Cohen said in a press interview. "S.D.I. still remains a very high priority, but it is not the only threat we face."⁵⁵

(U) Nunn's rationale was a little different. Having questioned the aims of SDI in the past, Nunn was now convinced that the program needed "refocusing if it is to serve valid national security needs, and if it is to enjoy the kind of bipartisan support that will be essential to see it through over a period of years." Like others on the committee, Nunn was dubious of SDIO's claims of technological progress toward the President's goal of making ballistic missiles impotent and obsolete. He thought that SDIO should concentrate research on more practical objectives with near-term utility. "While I believe," he said, "that the potential ability of ballistic [missile] defenses to provide a comprehensive, nationwide population protection should continue to be explored . . . the major emphasis within SDI should be dedicated to developing survivable and cost-effective defensive options for enhancing the survivability of U.S. retaliatory forces."⁵⁶

(U) The committee also served notice that this was likely to be the last year the administration could expect large increases in SDIO's budget. Henceforth, the committee said, it

⁵³ See Cohen's remarks, Congressional Record, Aug. 5, 1986: S 10359.

⁵⁴ S. Rpt. No. 99-331: 180-181.

⁵⁵ Quoted in "Panel in Senate Cuts Funds From Missile Defense Plan" New York Times, June 21, 1986: 50.

⁵⁶ Congressional Record, Aug. 4, 1986: S 10234.

intended "to support SDI at a robust but measured level consistent with the ABM Treaty until such time as progress in defining appropriate and realistic architectures, and determining the technical feasibility, survivability and cost effectiveness at the margin of potential SDI systems warrants further growth in funding."⁵⁷ Anticipating criticism that its cuts might weaken the U.S. negotiating position in Geneva, the committee readily conceded that SDI provided valuable leverage in the arms control talks; but it seriously doubted whether it was necessary to fund the full amount of the President's request to maintain that leverage. Rather, it was the belief of a majority on the panel "that leverage for arms control negotiations comes only from real defense programs which are aimed at realistic objectives, adequately funded, and broadly supported by a bipartisan consensus."⁵⁸

(U) Finally, the committee deferred action on an administration proposal to establish a federally funded research and development center (FFRDC), to be known as the SDI Institute, and recommended only that before any funds could be spent on the project, the Department of Defense would have to prepare a report detailing the center's intended activities. In an appended statement of views, Sen. Carl Levin (D., Mich.) questioned the need for such an institute, suggesting that contractors and existing FFRDCs could do the job just as well. Likewise, arguing that the Defense Department's plans for managing the institute would make it overly susceptible to SDIO's influence, he raised questions about the center's ability to provide independent and objective analysis.⁵⁹ Clearly, should the Defense Department decide to go forward with the center, Levin would have more to say.

(U) With the exception of Cohen, the committee's Republicans were dismayed by their colleagues' actions on the SDIO budget. Not only did they declare a \$3.6 billion funding level "insufficient to meet the requirements of national security." They also speculated that it would delay reaching a decision on possible deployment, undermine the long-term integrity of the program, and, contrary to the opinion held by a majority on the committee, send the wrong message to Moscow

⁵⁷ S. Rpt. No. 99-331: 181.

⁵⁸ *Ibid*, 182.

⁵⁹ *Ibid*, 475-477.

and undercut the U.S. negotiating team at Geneva.⁶⁰ But other committee members, including three liberal Democrats--Levin, Gary Hart of Colorado, and Edward Kennedy of Massachusetts--would have gone further in paring the program. Even Sen. J. James Exon, the usually pro-defense Democrat from Nebraska, who had in the past supported SDI, concurred that it was "breaking the bank" and ought to be reined in (as should defense spending in general, he added) in favor of a more balanced and "realistic" research effort.⁶¹

(U) Compared with the dramatic turn of events in the Armed Services Committee, the debate on the Senate floor was anti-climactic. Going into the debate Abrahamson and Donald A. Hicks, Under Secretary of Defense for Research and Engineering, made a strong appeal for restoration of SDI's budget to its minimum funding level of \$4.05 billion. They insisted that the committee's "diversion" of \$453 million originally slated for SDI into a balanced technology initiative was the result of a misperception: first, that other important research programs, including those involving conventional weapons, were under-funded; and second, that SDI research was of no particular value other than for strategic purposes. They pointed out that, far from it, SDI technologies had already yielded important progress in new anti-tactical missile defenses which would have important applications for countering the growing threat to U.S. and allied forces in Europe from highly accurate short-range ballistic missiles.⁶²

(U) On the Senate floor, however, the administration's arguments and those of its supporters failed to rally any restoration of money when the SDIO authorization came up for vote on August 5. On the contrary, the Senate narrowly rejected--by a one-vote margin in both cases--amendments that would have cut the authorization even further.⁶³ Significantly, supporters of SDI made no attempt to add back the funds the committee had cut, a tacit acknowledgment that the tide of opinion was now running against SDI. Afterwards, Senator Johnston, a sponsor of one of the failed

⁶⁰ *Ibid*, 463-467.

⁶¹ *Ibid*, 473-474.

⁶² Ltr, Abrahamson and Hicks to Goldwater, et. al., July 28, 1986, sub: FY 1987 Authorization Bill, SDIO Director's chron. files.

⁶³ For a summary of the Senate debate, see Congressional Quarterly Almanac, 1986, 472-473.

amendments, boasted of victory nonetheless. "The basic thrust of S.D.I.," he told the press, "has been changed by this debate."⁶⁴

(U) Reagan, on the other hand, was unwilling to admit defeat. The next day he hosted a briefing at the White House for SDI supporters and assured them that, come what may, he would not abandon SDI or offer it as a "bargaining chip" in the Geneva negotiations. And he added, trying to assuage those who thought the administration should move faster: "I know there are those who are getting a bit antsy, but to deploy systems of limited effectiveness now would deter limited funds and--or divert them--and delay our main effort."⁶⁵ Abrahamson likewise tried to be as optimistic as possible. "I think there's no question that the cuts we've had in the program have certainly affected it," he said during a nationally televised interview on August 10. "But to say that [the] program is decimated and it can't go forward I think is not accurate."⁶⁶ A few days later, writing to thank Senate backers of SDI for their recent support, he noted further: "While that funding level will not allow the pace and scope of research activity for which I had hoped, it is adequate to continue with credibility."⁶⁷

Further Setbacks in the House

(U) Abrahamson's optimism was premature, for the setback in the Senate was to prove only one of several that SDI would experience by the end of the session. Even before the vote in the Senate it was clear from the report of the House Armed Services Committee, released in late July, that members of the lower chamber also wanted to cut SDI. Arguing that it was skeptical whether

⁶⁴ "Senate Rejects Deeper Cuts in Missile Defense Program," New York Times, Aug. 6, 1986: A28.

⁶⁵ "Remarks at a White House Briefing for Supporters of SDI," Aug. 6, 1986, Reagan Public Papers, 1986, 1057-1059.

⁶⁶ Quoted from Abrahamson interview on "Meet the Press," Aug. 10, 1985, in New York Times, Aug. 11, 1985: A20.

⁶⁷ Ltr, Abrahamson to Robert C. Byrd, et. al., Aug. 15, 1986, sub: SDIO Authorization Bill, SDIO External Affairs, Congressional Correspondence file.

SDIO could effectively utilize the "large increase" requested in the authorization, the committee pared SDIO's budget to \$3.4 billion. In addition, the committee recommended that SDIO be required to pay closer attention to the Soviet short-range missile threat to Europe. For this purpose the committee earmarked \$50 million of SDIO's funds to initiate the development of a system for defense against tactical ballistic missiles.⁶⁸

(U) By the time the SDI authorization bill came up for a vote on the House floor on August 12, it was doubtful whether the committee's mark would stand. In all, the House considered four amendments to the spending bill, three of which it rejected. Those defeated included a proposal by conservative Republican Robert Dornan of California to fund the full amount of the President's request, soundly rejected by a vote of 324 to 94; another "kamikaze" amendment sponsored jointly by Reps. Ronald Dellums (D., Calif.) and Barbara Boxer (D., Calif.), that would have cut SDIO's budget to \$1 billion, also rejected by a large margin; and a "compromise" reduction put forth by Rep. Robert E. Badham (R., Calif.), who hoped to head off larger cuts by lowering the authorization to \$3.25 billion. Finally, the House approved (239 to 176), by a vote that generally followed party lines, an amendment sponsored by Democrat Charles E. Bennett of Florida that reduced the authorization to just under \$2.85 billion.⁶⁹ Earlier, Bennett, the second ranking member of the House Armed Services Committee, had said that his goal was to cap the authorization at the previous year's appropriation. "Funding the S.D.I. at President Reagan's level would clearly make it our top defense priority," he said. "It isn't, and that's why we should fund the program at last year's level. . . . Spending more than that would damage our national security in the near term in order to pursue a long-term dream of--to put it politely--uncertain potential."⁷⁰

(U) The vote in the House further reducing the SDIO authorization was a rebuff not only to the Reagan administration but also to Rep. Les Aspin (D., Wis.), chairman of the House Armed Services Committee. Democratic party liberals who had elevated Aspin to the chairmanship the

⁶⁸ H. Rpt. No. 99-718: 145-146.

⁶⁹ "House, 239 to 176, Decides to Reduce 'Star Wars' Money," New York Times, Aug. 13, 1986: A1, A14; Congressional Quarterly Almanac, 1986, 478-479.

⁷⁰ Charles E. Bennett, "Prepare for Ground Wars," New York Times, June 23, 1986: A15.

previous year expected him to steer the committee away from support of what they considered to be the administration's big-spending, destabilizing defense programs. Instead, Aspin had proved more supportive of SDI than the Democratic left wing thought he should be. Furthermore, he had voted additional funding for the MX missile, which Democratic liberals had wanted to kill, and, even more infuriating to them, he had voted to send \$100 million in military and non-lethal aid to the Nicaraguan Contras, the American-backed insurgency fighting the pro-communist Sandinista regime. That the House voted for an amendment sponsored by Charlie Bennett, a popular but somewhat solitary figure on Capitol Hill, whom the Democratic caucus had passed over in favor of Aspin, appeared to suggest that unless Aspin mended his ways, he might be ousted from the chairmanship.⁷¹

(U) The most serious damage by far, however, was to the administration's hopes for SDI. Had the House not voted the additional reduction, the administration could reasonably have anticipated an authorization in the neighborhood of \$3.4 to \$3.5 billion, a sum that Abrahamson had earlier described as "adequate." Now, with the House on record as favoring a significantly smaller figure, it was more than likely that the House-Senate conference committee, following its usual practice of splitting the difference, would end up with a bill authorizing considerably less than the administration had planned and well below what Abrahamson deemed satisfactory.

(U) As it turned out, the conference held no surprises. Reporting the results of its deliberations in mid-October, the committee compromised on a figure of \$3.213 billion, a 17 percent increase over the FY 1986 appropriation but nearly \$1.6 billion below the administration's request. In other actions relating to SDI, the conferees:

- adopted a House-passed provision prohibiting the establishment of an SDI Institute pending congressional authorization and receipt of full separate reports by the Secretary of Defense and the General Accounting Office;

- directed the administration to provide Congress with an estimate of the projected costs of a deployed SDI system;

⁷¹ For a more detailed treatment, see David Brooks and Peter Osterlund, "The Real Les Aspin Story," National Review, Dec. 19, 1986: 41-44.

--approved a motion passed in the Senate, sponsored by Sen. Malcolm Wallop (R., Wyo.), requiring an analysis by the administration of the ramifications of the less restrictive interpretation of the ABM Treaty on SDI development;

--urged closer attention to the problems of anti-tactical ballistic missiles (ATBM) and directed the Secretary of Defense to establish a specific office for this purpose; and

--earmarked funds for a "conventional defense initiative," in concert with the balanced technologies initiative approved by the Senate.⁷²

(U) With the authorization out of the way, Congress immediately set about putting the final touches on an appropriations bill, which by now was two weeks overdue. Skipping further debate, the House quickly approved the recommendations of its Appropriations Committee which in August had reported legislation containing a spending figure for SDI of \$2.846 billion, the same as in the House version of the authorization act.⁷³ Meanwhile, after defeating another attempt by Sen. J. Bennett Johnston to limit SDI growth to 3 percent, the Senate Appropriations Committee recommended a funding level for SDI of \$3.4 billion, nearly \$200 million less than the Senate-approved authorization.⁷⁴ Sen. Ted Stevens (R., Alaska), a strong champion of SDI and chairman of the Defense Appropriations Subcommittee, had tried to persuade the committee to accepted a higher figure. But he was unable to do so in the face of solid Democratic opposition and the defection of several key Republicans. Convinced that he could do no better, Stevens recommended the \$3.4 billion figure as a means of fending off further reductions.⁷⁵ Final action on the SDI appropriation, adopting the same spending limit as in the authorization, took the form on an omnibus continuing resolution which cleared Congress on October 17.⁷⁶

⁷² H. Rpt. No. 99-1001: 27-33, 445-447.

⁷³ H. Rpt. No. 99-793: 285.

⁷⁴ S. Rpt. No. 99-446: 331.

⁷⁵ Congressional Quarterly Weekly Report, Sep. 20, 1986: 2244.

⁷⁶ H. Rpt. No. 99-1005: 579.

FIGURE V-2
SUMMARY OF CONGRESSIONAL ACTION ON
THE FY 1987 SDI BUDGET
(\$ in millions)

President Requested	\$ 4,802
Senate-passed Authorization	3,597
House-passed Authorization	2,846
Congress Authorized	3,213
Senate-passed Appropriation	3,414
House-passed Appropriation	2,846
Congress Appropriated	3,213

Sources: H. Rpt. No. 99-1001; S. Rpt. No. 99-446; and H. Rpt. No. 99-1005.

(U) Though the full impact of the cuts Congress had mandated had yet to be determined, Abrahamson was certain that they would result in a significant setback. "This magnitude of Congressional reduction," he observed, "will definitely delay the development of critical technology in the SDI program."⁷⁷ But equally if not more important for the program's long-term prospects was the notable drop-off of political support for SDI, especially among Republicans. Clearly, congressional enthusiasm for SDI was fading.

The Reykjavik Pre-Summit

(U) By the time Congress finished work on SDI's FY 1987 budget, attention on Capitol Hill had turned to the hurriedly arranged meeting (October 11-12) in Reykjavik, Iceland, between President Reagan and General Secretary Gorbachev. Billed as an informal "pre-summit" discussion to lay the groundwork for a more formal meeting later, the Reykjavik talks were supposed to find a way of reenergizing the stalled Geneva arms control negotiations; but they ended in deadlock and confusion, only prolonging the impasse, with SDI more than ever the center of controversy.

(U) As he prepared to meet with Gorbachev, Reagan came under heavy pressure from supporters of SDI not to make concessions that would endanger the program or delay deployment. One group, composed of Representatives Jim Courter (R., N.J.), Jack Kemp, and Henry Hyde (R., Ill.), and over a dozen prominent private citizens who favored SDI, urged Reagan before he left for Iceland to announce deployment, as permitted under the ABM Treaty, of 100 defensive launchers as a signal of America's determination to go ahead with establishing a system of strategic defenses, including eventually SDI. They argued that otherwise, without the prospect of "definite consequences" for the program, SDI would not be "politically sustainable," a worrisome issue to be sure in view of the pounding that SDIO's budget was then taking in Congress.⁷⁸ Others, including

⁷⁷ Memo, Abrahamson to DepSecDef, Oct. 16, 1986, sub: SDI Program, SDIO Director's chron. files.

⁷⁸ Ltr, Courter, et. al., to Reagan, Oct. 1, 1986, SDIO External Affairs, Congressional Correspondence file.

Senators Pete Wilson (R., Calif.), Malcolm Wallop, and Dan Quayle (R., Ind.) wanted Abrahamson to brief Reagan before the summit, not only to bring the President up-to-date on SDI's technical progress, but also to remind him of the "vital importance" of the program. Though no such briefing was ever held, it was not for lack of interest on Reagan's part but rather the tightness of his schedule and Abrahamson's belief that he had done enough already to keep the President informed.⁷⁹

(U) At Reykjavik Reagan's determination to press on with SDI and the realities of the negotiating process came head to head.⁸⁰ Indeed, from the very outset of the talks it was clear that, from the Soviet standpoint, curbing SDI was the whole point of being there. The Soviets were also prepared to trade. Not only were they willing to accept Reagan's suggestion of a 50 percent reduction in offensive strategic weapons; they were also agreeable in principle to an American proposal for total elimination (the zero-zero solution) of all INF weapons. But the price for these concessions was strict adherence to the ABM Treaty as the Soviets interpreted it. Reagan said he favored a new treaty that would replace the ABM Treaty and commit the United States to sharing SDI technology with other countries, including the Soviet Union. Gorbachev was dubious. "The ABM Treaty," he reportedly replied, "must be strengthened, not scrapped."⁸¹

(U) As the talks progressed, the stakes increased. This apparently came as a surprise to American negotiators who had come anticipating a much more focused, less ambitious agenda. For their part, the Soviets seemed bent on a comprehensive settlement. In an effort to achieve a breakthrough Reagan abandoned his previously declared position that he would never use SDI for bargaining purposes, and offered a ten-year delay in the deployment of SDI in exchange for the

⁷⁹ Ltr, Wilson, Wallop, and Quayle to DepSecDef Taft, Oct. 6, 1986; memo, Abrahamson for Taft, Oct. 21, 1986, sub: White House briefing, both in SDIO External Affairs, Congressional Correspondence file.

⁸⁰ Unless otherwise noted this recapitulation of the Reykjavik meeting draws on the following: Strobe Talbott, The Master of the Game: Paul Nitze and the Nuclear Peace (New York: Knopf, 1988), 314-326; Paul H. Nitze, with Ann M. Smith and Steven L. Rearden, From Hiroshima to Glasnost (New York: Grove, Weidenfeld, 1989), 428-436; Donald T. Regan, For the Record (San Diego: Harcourt Brace Jovanovich, 1988), 337-355; and Kenneth L. Adelman, The Great Universal Embrace: Arms Summitry--A Skeptic's Account (New York: Simon and Schuster, 1989), 19-88.

⁸¹ Quoted in Talbott, Master of the Game, 317.

complete elimination of all U.S. and Soviet ballistic missiles. Gorbachev said he would consider the offer, but only if the United States in turn agreed to restrict all SDI research to laboratory or atmospheric testing. Space-based testing (without which there would be little possibility of verifying the effectiveness of SDI technologies) would be strictly prohibited.⁸² At this point the talks became hopelessly deadlocked. That requirement, Reagan said afterwards, "would have killed our defensive shield."⁸³

(U) Congressional reactions to the collapse of the Iceland summit followed generally predictable partisan lines. While Democrats tended to be critical of Reagan for missing an apparent opportunity to achieve substantial reductions in offensive strategic weapons, Republicans by and large applauded his determination to stand behind SDI. All agreed, however, that henceforth SDI was likely to be more controversial than ever. According to Sen. Sam Nunn, the outcome of the Reykjavik talks "showed that the major priority, the major focus of the Administration is to protect S.D.I. . . even at the stake of giving up deep cuts in Soviet systems." Sen. Gary Hart, then the leading contender for the Democratic party's 1988 presidential nomination, expressed a similar opinion. "It appears," he said, "that building Star Wars is more important to this Administration than meaningful arms control."⁸⁴ But Rep. Jack Kemp, another unannounced presidential candidate, took exception. In his opinion the breakdown of the talks further underscored the need for SDI. "After Reykjavik," he insisted, "SDI can no longer be allowed to simmer slowly on the back burner . . . the President, and other supporters of SDI both inside and outside the Administration, must move as quickly as possible to make it a reality."⁸⁵

(U) The most startling development, gleaned from post-summit opinion polls, was strong public support for Reagan's refusal to make a deal involving SDI and a corresponding increase in

⁸² Author's memcon with Nitze, Oct. 15, 1986, sub: Summit Meeting Between Reagan and Gorbachev in Reykjavik.

⁸³ "Remarks to American Military Personnel in Keflavik, Iceland," Oct. 12, 1986, Reagan Public Papers, 1986, 1365.

⁸⁴ Quoted in "View in Congress on Talks Mixed," New York Times, Oct. 13, 1986: A8.

⁸⁵ Jack Kemp, "The Politics of SDI," National Review, Dec. 31, 1986: 28.

public support for SDI. According to an NBC poll, 72 percent believed Reagan had made the right decision to stand firm on SDI, while a post-summit NBC-Wall Street Journal poll found that 55 percent thought it was important to elect pro-SDI members to Congress in the coming election.⁸⁶ In fact, public support for SDI was up overall. A Time-Yankelovich poll conducted just after the summit found 64 percent of those questioned in favor of SDI, compared with 59 percent a year earlier, while a U.S. News and World Report-Roper poll yielded similar findings.⁸⁷

(U) One consequence of these surveys was to cast SDI more than ever in the light of partisan politics. Republicans like Kemp interpreted the results not only as a reaffirmation of popular support for SDI but as a clear indication that those who opposed it were out of touch with mainstream American thinking. "Americans may not fully understand the intricacies of lasers, smart bullets, or particle beams," he observed. "But they do understand the character and intentions of the Soviet empire. And when they hear the Soviets express relentless hostility to SDI . . . they react as any rational people would."⁸⁸ Liberal Democrats offered another perspective. "If you took a poll today," said Democratic Senator Alan J. Dixon of Illinois, just after Reagan returned from Iceland, "people would say that the President is right. But in the long term, people will think we should be doing more to get a[n arms control] deal."⁸⁹

(U) What Dixon was suggesting was that while there appeared to be broad public support for SDI, it was in fact quite shallow, and that the groundswell of enthusiasm for SDI that had followed Reykjavik was not bound to last. Rather, it was "rally-'round-the-flag" sentiment that would evaporate quickly. Since the inception of the SDI program opinion polls had consistently shown the public to be in favor of strategic defenses. But it did not necessarily follow that these polls reflected the considered opinion of voters. Thus far there had been no opportunity, other than in 1984 when SDI had played a minor role in the presidential campaign, for pro- and anti-SDI politicians to probe

⁸⁶ National Review, Nov. 21, 1986: 12.

⁸⁷ Memo, undated, sub: Public Attitudes Toward SDI, enclo. to Ltr, Abrahamson to Rep. Barbara Boxer, Apr. 2, 1987, SDIO External Affairs, Congressional Correspondence file.

⁸⁸ Kemp, "The Politics of SDI," 28.

⁸⁹ Quoted in "Star Wars Battle Looms in Congress," New York Times, Oct. 15, 1986: A14.

voter sentiment on the issue. The test would come with the election of 1986 and it would, in more ways than one, prove a turning point in SDI's fortunes.

SDI and the 1986 Elections

(U) In the wake of the frustrations and disappointments of the Reykjavik summit, Reagan was more determined than ever to proceed with SDI. He also felt that the summit's failure to come to an agreement on strategic arms control was in no small part the fault of liberal Democrats in Congress who had undercut his negotiating position by slashing SDI's funding. Hoping to capitalize on the upsurge of popular support for SDI that recent opinion polls suggested, Reagan resolved to take his case for strategic defenses to the people, and in the weeks that followed his return from Iceland he conducted a barnstorming campaign around the United States on behalf of Republican candidates who supported his position.

(U) Reagan had good cause to do so in any case, SDI notwithstanding. Though there was little chance of Republicans gaining a majority in the House, there was the distinct possibility that they would lose their six-year-old hold on the Senate. Of the 34 senators up for reelection, 22 were Republicans; to gain control the Democrats needed to win only four. As it happened, they gained eight, but not until after Reagan had placed a great deal of his prestige and credibility on the line. The results did not automatically discredit Reagan's leadership nor did they signal the voting public's rejection of SDI, as some liberal Democrats tried to claim. But the overall effect was to press the program even further into a political corner.

(U) Reagan concentrated his campaigning for the most part in southern and western states where voter preferences tended to be more conservative. Giving priority to stumping for Republican senatorial candidates, Reagan repeatedly highlighted SDI, variously terming it "America's insurance policy" and "the key to a world free of nuclear blackmail." All along the way, he urged voters: "Don't let liberals in Congress throw it away."⁹⁰ Opponents, though, were also active. At one

⁹⁰ "Remarks at a Senate Campaign Fundraising Luncheon for Linda Chaez in Baltimore, Maryland," Oct. 15, 1986, Reagan Public Papers, 1986, 1387 and *passim*.

point, in scenes reminiscent of the Vietnam War days, demonstrators staged simultaneous protests against SDI in Washington, Cleveland, and Sunnyvale, California, and even succeeded in having some of their members arrested in front of television cameras.⁹¹

(U) Still, SDI was by no means the leading or even most controversial issue in the campaign. The closest any congressional contest came to being a referendum on SDI was in Colorado where Republican Rep. Ken Kramer found himself in a close race with Democratic Rep. Timothy E. Wirth for the Senate seat being vacated by Gary Hart. Kramer, who had once sponsored legislation to make SDI a national priority, now wanted to make it "a fundamental issue" in the campaign. Colorado had already been designated the site of the National Test Facility, a major computer simulation center for evaluating SDI technology, which was expected to generate 8,000 new jobs. But like other states with heavy SDI investment--California and Massachusetts, most notably--Colorado supported representatives to Congress such as liberal Democrat Patricia Schroeder who were strongly anti-SDI. That Kramer went down to defeat (49 to 51 percent) was probably, as local polls predicted before the vote, as much the result of other issues as SDI.⁹²

(U) Reagan's efforts, as it turned out, were of marginal consequence. Of the twelve senatorial candidates for whom he had campaigned, nine lost. Three of the nine were seeking Senate seats for the first time, but six were incumbents. As in most non-presidential elections, local preferences tended to predominate in the selection of winners. But because Reagan had chosen to make SDI an issue, campaigning for it personally, it was entirely plausible that it, too, had been injured. Of the numerous defeats SDI had suffered in 1986, the election results were the capstone. Even though SDI would carry on, there was little likelihood that the administration would ever be able to recoup the ground it had lost.

⁹¹ New York Times, Oct. 21, 1986: A14.

⁹² See "Senate Nominee Pushes 'Star Wars' in Colorado," New York Times, Oct. 15, 1986: A18.

CHAPTER VI

LEGISLATIVE STALEMATE (1987)

(U) Throughout the last two years of his presidency Ronald Reagan clung to the belief that SDI was the key to America's future security, a program of the highest priority that Congress should recognize and treat as such. But by 1987 SDI had lost much of its luster and appeal on Capitol Hill, an indication that support for the program was no longer as strong or as firm as it once had been. Thus far, since SDI officially began in 1984, Congress had appropriated nearly \$7.4 billion for the program but had yet to see much in the way of tangible results. Pressure was growing from two directions: from opponents, who wanted SDI scaled down to a modest research program that could be held in reserve in the event of a Soviet breakthrough in ballistic missile defenses; and from dedicated supporters who were eager to see both more invested and more concrete results, limited though they might be, which would bolster public confidence in the program, help justify the further commitment of effort and resources, and pave the way for a decision on deployment. In between, as in the past, were those with the votes to sway the outcome one way or another.

(U) The 1987 congressional debate over SDI was, from the outset, considerably different from that of previous years, due mainly to the fact that Republicans no longer enjoyed control of the Senate. With the Democrats now holding commanding majorities in both houses of Congress, having won back the Senate the previous November, it was clear that any administration proposal would encounter the unavoidable impediments of partisan politics. Senate Democrats were keen on exercising their newly won power, and along with their colleagues in the House, they were determined to have more of a voice, not only in the funding of programs, but also in the policy guiding them. Even though sentiment in the Senate remained generally more supportive of SDI than in the lower chamber, there was no doubt that both chambers would take a critical look at the program, with less benefit of the doubt than in the past.

Changes in Congress

(U) The first session of the newly elected One Hundredth Congress convened in Washington on January 6, 1987, and promptly set about organizing itself. This was the first Congress in six years with a Democratic majority in both houses, and its inclination, compared with its three immediate predecessors, was to be both more liberal on social and domestic issues and less supportive of the President's defense policies, including SDI. Many of those just elected, Republicans as well as Democrats, had run on campaigns the previous autumn that had emphasized fiscal responsibility and curbs on growth in Federal spending. In seeking to make good on these promises, many members, as usual, eyed defense as the logical starting point for cutbacks and reductions. SDI, because of its high visibility, controversial reputation, and relatively large budget, was an especially inviting target.

(U) The most significant changes as a result of the election were in the Senate, where the loss of Republican control led to the wholesale reshuffling of committee chairs. The two new committee chairmen with the most immediate influence over SDI were Sam Nunn (D., Ga.), who now presided over the Armed Services Committee, and John C. Stennis (D., Miss.), who chaired both the Committee on Appropriations and its Subcommittee on Defense, jobs he had held prior to Republican control of the Senate in 1981. A veteran of the upper chamber since 1947, Stennis was well regarded in both parties and, like many other southern politicians, tended to be pro-defense in outlook. But at age 85 and reportedly in frail health, his effectiveness at promoting SDI was questionable.

(U) Nunn, in contrast, was to prove an exceptionally vigorous chairman whose relations with the Reagan administration would not always be on the best of terms. Though a past supporter of SDI, he had also been critical of the program, often faulting it for being too lofty in its expectations and for not giving closer attention to more practical near-term applications. Determined to make the committee a full participant in the policy process, he arranged, shortly after being named chairman, to conduct a special series of 16 hearings on defense strategy, in effect subjecting the administration's programs, including SDI, to his own review.¹ Generally regarded as the most well

¹ According to the committee's report on these hearings, their function was twofold: first, "to place increased attention on the formulation and articulation of U.S. strategy;" and second, to shift "the focus of activity away from an excessively detailed line-item review of the

informed member of the Senate on defense affairs, Nunn's opinions and assessments carried considerable weight, both on Capitol Hill and with the news media. But among senior administration officials, the attitude was much less favorable. Secretary of Defense Caspar Weinberger, for one, found Nunn's behavior oftentimes reprehensible. "He knows a lot about defense," Weinberger said of Nunn, "but I don't think he uses that knowledge in any way that's constructive. He's always the first man in line to tell you you don't have any strategy. Secondly, he's the first man in line to tell you you don't have any policy. And all that means is that he doesn't agree with what you're doing."² Nunn doubtless thought otherwise.

(U) In the House, where Democratic control remained firmly intact, the most significant post-election development to affect SDI was a challenge to Rep. Les Aspin's chairmanship of the Armed Services Committee. Aspin's support of the MX missile, military aid to the Nicaraguan contras, and his reluctance in conference to oppose the higher defense authorizations voted by the Senate, had antagonized many House liberals. As a result, in a secret, nonbinding up-or-down ballot on January 7, House Democrats voted 130 to 124 to remove Aspin as committee chairman.³ Although the Democratic House caucus subsequently reversed this decision and elected to keep Aspin on, the message was clear that his future as a party leader rested on his taking more strenuous opposition to the administration's foreign and defense policies.⁴ Accordingly, in evaluating President Reagan's proposed military budget for FY 1988, including requested spending for SDI, Aspin would be more critical and assertive than he had been in the past.

defense budget and toward consideration of the fundamental issues of national defense." S. Rpt. No. 100-57: 6.

² Author's interview with Weinberger, June 13, 1990.

³ New York Times, Jan. 8, 1987: A1.

⁴ See "Aspin Makes Comeback at Armed Services," Congressional Quarterly Weekly Report, Jan. 24 1987: 139.

The Emerging Controversy
over Phased Deployment

(U) Once organized, the lawmakers' first order of business was the President's budget request for Fiscal Year 1988, which went to Capitol Hill shortly after Congress assembled. Responding to congressional direction, the Department of Defense submitted a detailed two-year budget plan (the longest allowed for military appropriations under the Constitution) for the first time in its history in the hope that Congress would appropriate funds for both years in one budget cycle. This did not prove to be the case, but the two-year budget overview did give Congress and the American public a better sense of defense requirements than they were used to having. For FY 1988 the Defense Department requested new budget authority of \$303.3 billion, and for FY 1989 it wanted \$343.9 billion.⁵ After adjusting for expected inflation the overall real increase for FY 1988 was 3 percent, the smallest defense increase request since Reagan took office. But for RDT&E the increase was considerably greater--17 percent--with much of that earmarked for SDI.⁶ Indeed, for the upcoming fiscal year, SDIO estimated its budget requirements at just over \$5.2 billion, up more than 60 percent from the previous year's appropriation of \$3.2 billion. In addition, SDIO also sought a \$500 million supplemental to its FY 1987 appropriation, and projected requirements for FY 1989 at nearly \$6.3 billion.⁷ According to Deputy Secretary of Defense William Howard Taft IV, SDI was now the "highest priority" strategic program in the Defense Department budget because of its potential contribution to national security.⁸

⁵ U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Years 1988 and 1989, Part 1, U.S. Military Posture (Washington, D.C.: G.P.O., 1987), 207.

⁶ Richard Stubbing, "The Defense Budget," in Joseph Kruzal (ed.), American Defense Annual, 1987-1988 (Lexington, Mass.: D.C. Heath and The Merston Center, Ohio State University, 1987), 60.

⁷ U.S. Congress, House, Committee on Armed Services, Hearings: National Defense Authorization Act for Fiscal Years 1988/1989: Research, Development, Test, and Evaluation--Title II, 100:1 (Washington, D.C.: G.P.O., 1987), 13.

⁸ Taft testimony, Feb. 3, 1987, U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1988, 100:1 (Washington, D.C.: G.P.O., 1987), Pt. 1, 16.

Figure VI-1

SDIO BUDGET REQUIREMENTS

FYs 1987-1989

(\$ in Millions)

Program Element	FY87 Approp.	FY87 Sup. Request	FY88 Request	FY89 Budget Est.
SATKA	\$911.0	\$70.0	\$1,492.7	\$1,859.5
DEW	844.0	70.0	1,103.7	1,245.8
KEW	730.0	60.0	1,074.7	1,199.7
SC/BM/C3	387.0	40.0	627.3	787.5
SLKT	338.0	260.0	900.4	1,162.2
Program Management	19.9	-0-	22.0	27.3
TOTALS	\$3,229.9	\$500.0	\$5,220.8	\$6,282.0

Source: U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Years 1988 and 1989, 100:1 (Washington, D.C.: G.P.O., 1987), Pt. 4, 2561.

(U) Surprisingly, congressional criticism of the administration's proposed defense budget was somewhat less than it had been in the past, possibly because the overall requested increase was generally well below previous years. In the view of Rep. William L. Dickinson of Alabama, ranking Republican on the House Armed Services Committee, this was the first defense budget in some time to set "realistic" targets instead of "something that might be nice to have but which experience shows . . . is beyond the realm of being practical."⁹ Even so, Dickinson saw growing pressures in Congress to put more emphasis on conventional rather than strategic forces, a shift in priorities that could have a "negative impact" on funding for strategic programs "whether it be carriers or SDI."¹⁰ And with the Federal budget projected to be still deeply in the red, Republicans and Democrats alike agreed that paring the defense appropriation would be inevitable. According to administration estimates, the President's budget envisioned a deficit of \$107.8 billion, compared with a Gramm-Rudman-Hollings deficit ceiling of \$108 billion.¹¹ But the Congressional Budget Office (CBO), using different computations, more accurately predicted a deficit of \$135 to \$140 billion.¹²

(U) One of the reasons for the especially large requested increase for SDI was the administration's contention that progress over the previous year had been faster than expected and that the time had therefore come to begin thinking of possible deployment. Based on ongoing research, it was increasingly apparent by 1987 that, while many advanced technologies were still years--even decades--away from perfection, others were showing immediate possibilities for near-term deployment. Those in the former category included the free electron laser and the X-ray laser, both of which the Fletcher panel had cited for special attention. But according to Roy Woodruff, one-time director of X-ray laser research at the Lawrence Livermore National

⁹ U.S. Congress, House, Committee on Armed Services, Hearings: National Defense Authorization Act for Fiscal Years 1988/1989: Authorization and Oversight, 100:1 (Washington, D.C.: G.P.O., 1987), 2.

¹⁰ U.S. Congress, House, Committee on Armed Services, Hearings: National Defense Authorization Act for Fiscal Years 1988/1989--Research, Development, Test, and Evaluation--Title II, 100:1 (Washington, D.C.: G.P.O., 1987), 2.

¹¹ New York Times, Jan. 6 1987: A1, A16.

¹² SCAS, Hearings: Military Posture, 205.

Laboratory, reports of the project's early progress on which the Fletcher panel had based its recommendation, had been overly optimistic, the result of pressure from Edward Teller and his protege, Lowell Wood, to assure funding for further research and to promote Livermore's role in SDI.¹³

(U) Indeed, in nearly the entire field of directed energy research, progress was generally slower than Fletcher and his colleagues expected. In a report screened by the Defense Department and released in April 1987 by the American Physical Society (APS), a panel of physicists, co-chaired by Nicholaas Bloembergen of Harvard University and Kumar N. Patel, executive director of research for the AT&T Bell Labs, concluded that research on directed energy weapons (DEWs), such as ground- and space-based lasers and particle beams, had thus far yielded "insufficient information to decide whether the required extrapolations can or cannot be achieved." The report added that sufficient data was unlikely to be available until the late 1990s to know with any confidence whether DEWs could be made to work, and that actual deployment could not occur until well into the 21st century, if even then.¹⁴ "The ultimate conclusion that we come to," Patel observed, "is that over the past 20 years, a substantial amount of progress has been made in many of these technologies, but there is a long way to go."¹⁵

(U) Yet if some areas of research were now less promising than the Fletcher panel had originally thought, others appeared to be opening whole new possibilities. Especially notable was the progress in space-based kinetic kill vehicles (SBKKVs), which used a variety of non-nuclear kill mechanisms to intercept enemy missiles in their post-boost phase before release of their multiple warheads. The most successful demonstration thus far had been the DELTA 180 test. Held on September 5, 1986, it involved a device launched from Cape Canaveral, Florida, on a rocket booster which had tracked and intercepted another device resembling the upper stage of a Soviet ICBM that

¹³ On the controversy concerning the X-ray laser, see Deborah Blum, "Weird Science: Livermore's X-ray Laser Flap," Bulletin of the Atomic Scientists, 44 (July-Aug. 1988): 7-13.

¹⁴ Colin Norman, "Doubt Cast on Laser Weapons," Science (May 1, 1987): 509-510.

¹⁵ Patel testimony, May 6, 1987, U.S. Congress, Senate, Committee on Governmental Affairs and Committee on Armed Services, Joint Hearing: Need for and Operation of a Strategic Defense Initiative Institute, 100:1 (Washington, D.C.: G.P.O., 1987), 38.

was orbiting within the earth's atmosphere over the Pacific. Out of this and further experiments would evolve even more promising prospects under a program known as "Brilliant Pebbles."¹⁶

(U) Proponents of SDI hailed the DELTA 180 test as a major turning point, proof that boost-phase intercept--the key to an effective layered defensive system--was feasible.¹⁷ Boost-phase intercept would destroy a large number of Soviet missiles before they could release their warheads and decoys and thus substantially reduce the number of objects that the remaining layers of the defense would need to deal with. Critics, however, remained dubious, arguing that the experiment had been rigged since the attacking spacecraft had been fitted with radar guidance and the target with a radar reflector that magnified its image--an aid to interception that the Soviets were unlikely to provide on their attacking missiles. John Pike of the Federation of American Scientists, a group already on record as strongly opposed to SDI, likened the experiment to "sending two trains together on the same track."¹⁸ Abrahamson, on the other hand, characterized the DELTA 180 test as "the most complex command and control space mission that the United States has ever conducted."¹⁹

(U) Feeling that a breakthrough had been achieved, Abrahamson and Secretary of Defense Weinberger arranged a major presentation, with charts and graphs, to alert President Reagan to the possible implications. At a White House meeting on December 17, 1986, they urged increased funding for SDI and persuaded the President not to succumb to pressure from those in Congress and elsewhere who favored early deployment of limited ground-based defensive missile systems (the only type allowed under the ABM Treaty) which would eventually be incompatible with more sophisticated and more effective space-based SDI technologies. Instead, Weinberger and Abrahamson

¹⁶ "SDI Delta Space Experiment To Aid Kill-Vehicle Design," Aviation Week & Space Technology, Sep. 15, 1986: 18-19; Abrahamson testimony, Mar. 19, 1987, U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1988, 100:1 (Washington, D.C.: G.P.O., 1988), Pt. 2, 203.

¹⁷ The reason for this was that, without boost-phase intercept, Soviet missiles could, under a full-scale attack, release more than 30,000 warheads and decoys because of their multiple-warhead capability.

¹⁸ Pike quoted in Science (Jan. 16, 1987): 278.

¹⁹ Aviation Week & Space Technology, Sep. 15, 1986: 18.

recommended that Reagan support what they termed "phased" or incremental deployment of SDI defenses starting around 1994. The defenses they envisioned consisted of a layered combination of space-based kinetic kill devices backed by two land-based rocket systems: ERIS (for Exoatmospheric Reentry Vehicle Interception System), the outgrowth of an Army project dating from 1977; and HEDI (High Endoatmospheric Defense Interceptor), a rapid-acceleration rocket capable of intercepting warheads high in the atmosphere. Should any warheads get passed the SSKKVs, it would be up to the ERIS rockets to attack them while still in space and for the HEDI interceptors to destroy the rest high in the atmosphere. Reagan approved the overall concept, and by so doing set in motion the bureaucratic process which by the summer of 1987 would move SDI from the research phase into the demonstration and validation phase, the first step toward actual acquisition of weapons systems.²⁰ Weinberger, in his memoirs, states that the meeting occurred on December 19, but all other sources give the date as the 17th.

(U) Although SDIO's proposed budget for FY 1988 did not directly reflect these decisions, analysts in the Congressional Budget Office said they had detected subtle shifts in funding in favor of more mature technologies--SSKKVs especially--that could be used in near-term deployment.²¹ Obviously, the time was approaching when Congress could expect a request for appropriations to begin deployment. While no such request was in the immediate offing, rumors and press reports were rife, as Congress returned to work at the beginning of 1987, that the administration was about to embark on a major departure of policy, adopt the broad interpretation of the ABM Treaty in order to facilitate more extensive testing, and thereby lay the groundwork for future deployment. Confirming the gist of these reports, Secretary of Defense Weinberger told the Senate Armed Services

²⁰ Author's interview with Weinberger, June 13, 1990; Caspar Weinberger, Fighting for Peace (N.Y.: Warner Books, 1990), 324; R. Jeffrey Smith, "Offensive Taken for Partial SDI Deployment," Washington Post, Jan. 18, 1987: A1, A12-A13.

²¹ U.S. Congress, House, Committee on Armed Services, Hearings: SDI Program, 100:1 (Washington, D.C.: G.P.O., 1988), 4.

Committee on January 12, 1987, that he was indeed in favor of deployment and that he would support incremental deployment of SDI technologies "once research had reached that point."²²

(U) As logical an outcome as preparing for possible phased deployment may have been, it raised serious questions that had yet to be addressed, either within the administration or on Capitol Hill. Not only would taking this step substantially increase program costs; it would also complicate ongoing arms control negotiations with the Soviets, necessitate extensive consultations with U.S. allies, require abrogation or amendment of the 1972 ABM Treaty, and ultimately perhaps provoke a costly and ominous Soviet-American defensive arms race in space.

(U) As the potential complications became clearer, they provoked considerable difference of opinion, not only in Congress, as might be expected, but within the administration as well. After the abortive Reykjavik summit the previous fall, Reagan seemed to become somewhat disillusioned with arms control and reportedly leaned toward a suggestion from Weinberger that he include in his 1987 State of the Union Message an endorsement of early SDI deployment. But the President was dissuaded from doing so by his new national security adviser, Frank C. Carlucci, who pointed out that no formal decision, one way or the other, on deployment had yet been taken.²³ Subsequently, on February 3, at a White House meeting of the National Security Planning Group, Reagan attempted to achieve a consensus, only to find his senior advisers divided. According to minutes of the meeting that leaked to the press, Weinberger argued forcefully for adoption of the broad interpretation of the ABM Treaty, if the United States were to proceed with the development of concrete plans to deploy the weapons systems which he and the President had discussed the previous December. "We need the phased deployment," he said, "because you can't do it all at once." Others, however, were skeptical that the time was right for such actions. Secretary of State George P. Shultz stressed the diplomatic hurdles that had yet to be crossed, while the Chairman of the Joint Chiefs, Admiral William Crowe, drew attention to the limited military advantages that an SDI deployment, such as

²² U.S. Congress, Senate, Committee on Armed Services, Hearings: National Security Strategy of the United States, 100:1, Jan. 12, 1987, Steno. transcript, p. 112, copy in SDIO External Affairs, Hearings file.

²³ Author's interview with Carlucci, Sept. 9, 1991. Also see Wall Street Journal, Feb. 12, 1987: 1, 15.

the one Weinberger and Abrahamson favored, would offer. In making the transition from an offensive to a defensive strategy, Crowe believed, SDI would have to assure greater protection than current technology was capable of demonstrating. "The chiefs support SDI," he said, "and support phased deployment. But we don't have enough in hand to decide now." Reagan, who had the final word, was likewise of two minds. Although he thought the broad interpretation was "right," he hesitated to endorse using it and ruled out "going nearly as far as" the Soviets had gone in their ABM research.²⁴

(U) The upshot of the meeting was a new National Security Decision Directive (NSDD 261) which effectively postponed a decision on phased deployment until the State and Defense Departments could come closer to a common position. By the end of April, Defense was supposed to produce a detailed list of experiments which could be conducted only under the broad ABM Treaty interpretation, while State completed a new legal analysis of the treaty and conducted consultations with U.S. allies.²⁵ Officially, Reagan remained committed to the policy he had endorsed a year and a half earlier sanctioning only those tests that complied with the narrow interpretation. All the same, it was Weinberger's sense that the President would change his mind and "very soon" endorse new and more extensive testing under the broad interpretation.²⁶

(U) Reactions on Capitol Hill to these developments followed predictable lines. While proponents hailed the prospect of deployment as encouraging and long overdue, opponents attacked it as ill-conceived, precipitous, and likely to generate costs that the country could not afford. Rep. Jim Courter (R., N.J.), an outspoken proponent of SDI, was disappointed that the administration was not prepared to do more and include in its recently proposed budget funds "specifically earmarked for near-term deployment of initial SDI systems." "This, in my view," he observed, "is a grave mistake and virtually ensures that the SDI budget request will be reduced significantly, perhaps as

²⁴ "Reagan Leaning Toward SDI Deployment," Washington Times, Feb. 6, 1987.

²⁵ Arms Control Reporter, 1987, sec. 575.B., pp. 199-200.

²⁶ Weinberger testimony, Feb. 17, 1987, SCAS, Hearings: DoD Authorization for FYs 1988 and 1989, Pt. 1, 279.

low as the FY87 authorization level."²⁷ Sen. Albert Gore, Jr. (D., Tenn.), on the other hand, saw the consequences differently. Once a lukewarm supporter of SDI, he now termed reports of possible deployment "a formula for an accelerated arms race and the end of any meaningful arms control efforts."²⁸ Sen. J. Bennett Johnston (D., La.), a long-time foe of SDI, expressed similar sentiments, adding that, while he would continue to vote funding for research, he would oppose any measure that might jeopardize the ABM Treaty or further SDI deployment.²⁹ In the House, Rep. Norman D. Dicks (D., Wash.), another persistent critic of SDI, speculated that the administration's effort to lay the groundwork for deployment was politically motivated and that its central purpose was to placate certain unidentified members of Congress who were demanding faster action. If so, Dicks said, the administration was making a serious mistake. "The Congress," he insisted, "is not going to buy something if it looks like it has been politicized."³⁰

(U) As the congressional questioning of the administration's future agenda for SDI intensified, it again turned to the credibility of SDIO's director. Attempting to deflect criticism, Abrahamson denied that phased deployment was "something new" or that it had been introduced for "political purposes." In response to questions concerning costs, he estimated before the House Defense Appropriations Subcommittee that the layered defense system under consideration could be deployed for somewhere between \$40 and \$60 billion.³¹ This--the first administration estimate of its kind to be made public--was in sharp contrast to the trillion dollars or more that some outside "experts" had projected. But in Senate testimony, Abrahamson also noted that he and his organization were growing "frustrated" because "we do not have enough money to carry out all phases of the

²⁷ Ltr, Courter to Weinberger, Jan. 27, 1987, SDIO External Affairs, Congressional Correspondence file.

²⁸ New York Times, Jan. 16, 1987: A3.

²⁹ SCA, DoD Appropriations for FY 1988, Pt. 2, 255-256.

³⁰ HCA, DoD Appropriations for 1988, Pt. 6, 1061.

³¹ *Ibid*, 1001-1006.

program." Sen. Patrick J. Leahy (D., Vt.) was skeptical. "I understand you are a strong advocate of SDI," Leahy told Abrahamson, "but it looks to me like you are gilding the lily here."³²

(U) Opponents were also quick to challenge the technical progress that SDIO claimed it was making. According to Rep. Dicks, SDI was "focusing more and more on high cost, high visibility tests and demonstrations that may be attractive stunts, but contribute little to real research."³³ Taking a similar position, Senators Proxmire, Johnston, and Chiles released in early April a second, updated version of their previous year's staff study report on SDI containing, in Proxmire's view, "devastating revelations."³⁴ While the report, entitled "The Strategic Defense Initiative: Progress and Challenges," acknowledged that SDIO was making headway, it also maintained that the "task at hand and the hurdles it faces are so exacting that the sum of research cannot be judged solely by its parts." Contrary to Pentagon claims, "SDI research has not progressed nearly as rapidly as has been portrayed by senior administration and SDI officials." If anything, the staff study argued, the most "dramatic progress" to date was that made in identifying the operational problems a strategic defense system would face. Solving those problems had barely begun. "So far," the report maintained, "SDI has moved ahead by inches, while we still have miles to go."³⁵

(U) Like the Congressional Budget Office, the congressional staffers detected priority shifts within the SDI program indicating that the administration was reorienting research in order to position itself for possible deployment sometime in the 1990s. "Statements from SDI officials that, 'this is just a research program at this stage,' are not entirely accurate," the study claimed. Not only had laser and particle beam research been curtailed in favor of stepping up work on weapons with more immediate application, like kinetic kill vehicles, but also there were signs that SDIO had in reserve a classified "black" program for developing "a reference plan for a near-term deployment of

³² SCA, DoD Appropriations for FY 1988, Pt. 2, 239.

³³ Dicks testimony, Feb. 26, 1987, U.S. Congress, House, Committee on Foreign Affairs, Hearings: Review of ABM Treaty Interpretation Dispute and SDI, 100:1 (Washington, D.C.: G.P.O., 1987), 8.

³⁴ SCA, DoD Appropriations for FY 1988, Pt. 2, 174.

³⁵ Douglas C. Waller, James T. Bruce, and Douglas M. Cook, The Strategic Defense Initiative: Progress and Challenges (Claremont, Calif.: Regina Books, 1987), 40-41, 105.

strategic defenses"--in other words, a secret deployment option being concealed from Congress. Based on the information they had been able to glean, the staff members maintained that available Soviet countermeasures, such as re-equipping ICBMs with fast-burn boosters, would render any space-based system of defense built around kinetic energy weapons ineffective. The conclusion the report drew, therefore, was that the layered defense under consideration would have a "very limited capability" and that such a system "would not significantly enhance U.S. security and would only serve as a somewhat complicating factor for Soviet attack plans."³⁶

(U) Not surprisingly, SDIO sharply disagreed with the staff study's findings. In a letter to Proxmire, Abrahamson condemned the report as basically "inaccurate" and a "great disservice" to the SDI program. In particular, he took issue with the report's recurring theme that a decision had been taken to pursue technologies with the greatest promise of near-term deployment, and that SDI research had been reoriented accordingly. "No decision has been made," he insisted, "and the program has not been restructured to implement a deployment. My research charter continues to address the spectrum of mature and advanced technology research." To support his position, Abrahamson included with his letter a point-by-point rebuttal of the report's claims, denying any existence of a "black program" (though it was true that from 1986 on, an increasing number of SDIO's directed energy and electro-optics programs were being placed under "black" security classification) and highlighting what SDIO analysts saw as the staffers' "basic misunderstanding" of strategic defense technologies and their penchant for drawing "incorrect conclusions."³⁷ But as he had the year before, Proxmire appeared to pay little mind.

³⁶ *Ibid*, 65, 106.

³⁷ Ltr, Abrahamson to Proxmire, Apr. 8, 1987, with enclo., SDIO Director's Chron. file.

The ABM Treaty Interpretation

Dispute Revived

(U) Adding to the wrangling over phased deployment was the increasing likelihood of a showdown between Congress and the Reagan administration over interpretation of the 1972 ABM Treaty. The immediate issue was the so-called "broad" interpretation of that treaty, first raised in 1985, which sanctioned a significantly greater range of SDI testing, including actual tests of weapons in outer space, than the traditionally accepted "narrow" reading of the treaty, which would have barred such testing. But even though President Reagan, acting on the advice of State and Defense legal counsel, had proclaimed the broad interpretation legally correct and acceptable, he had also instructed SDIO to continue to abide by the narrow interpretation in conducting research and testing. This had helped to deflect criticism of the program, but by 1987 it was proving a hindrance by delaying plans for the development of key technologies and by driving up costs. Now, with phased deployment up for possible consideration also, a more liberal testing and development schedule became all the more attractive to SDIO and congressional supporters of the program. According to an inter-agency report generated at the specific request of Sen. Malcolm Wallop and submitted to Congress in May 1987, use of the broad interpretation could save \$3 billion in R&D costs and cut research time by two years.³⁸

(U) Congressional critics and opponents of SDI tended to counter that use of the broad interpretation would all but assure eventual deployment, wreck arms control efforts in the process, and make a costly, destabilizing weapons race in space virtually unavoidable. But they argued their case less from the standpoint of what might be best for national security, than from the constitutional validity of the narrow interpretation--that is, that the Senate had given its advice and consent to the ABM Treaty in 1972 under the narrow interpretation, and that the Reagan administration was therefore bound to adhere to those terms. Supporters of SDI countered that this was nothing more than legalistic posturing, designed only to obstruct the program and divert attention from the really

³⁸ J.W. Schomisch, Guide to the Strategic Defense Initiative (Arlington, Va.: Pasha Publications, 1989), 42.

important question of what was best for the country's security.³⁹ Between these two points of view there seemed little common ground for compromise. The more obdurate both sides became, the more likely it was that Congress would find itself in a legislative stalemate over the FY 1988 defense authorization and appropriation bills.

(U) Leading the charge to protect the integrity of the narrow interpretation were Democratic Senators Sam Nunn and Carl Levin. A skeptic of SDI almost from its inception, Levin predicted that if the administration made any attempt to implement a new interpretation of the ABM Treaty, "all hell would break loose" on Capitol Hill.⁴⁰ Along with other interested senators, he had pressed the administration in 1986 to make available to them the negotiating record of the ABM Treaty (see Chapter V). The ensuing impasse was finally broken late that summer, yielding an arrangement under which a select group of senators and designated members of their staffs would have access to the negotiating record. Levin was among the first to exercise his options.

(U) In a twelve-page letter of December 1, 1986, to Secretary of State Shultz, Levin, after reviewing the negotiating record and after talking with several members of the negotiating team, launched a broadside. At the outset, he attacked the administration's reading of the treaty, including supporting documentation and interpretive analysis provided by the State Department's legal adviser, Judge Abraham Sofaer, as "incorrect" and "fatally flawed." In Levin's view, "Judge Sofaer has provided the Congress with an incomplete and misleading analysis" derived from a "selective reading of the record." While acknowledging that the treaty itself was ambiguous on the issue of research and testing, Levin insisted that the record of the negotiations and testimony by administration witnesses in 1972 clearly supported U.S. acceptance of the restrictive reading of the treaty. *"In my view,"* the senator speculated, *"Judge Sofaer had an ax to grind--and after he sharpened it, he buried that ax in the back of the ABM Treaty."* Not content simply to criticize, Levin urged the appointment

³⁹ See for example the remarks by Sen. Dan Quayle (R., Ind.), SCAS, Hearings: DoD Authorization for FYs 1988 and 1989, Pt. 1, 295; and Sen. Gordon J. Humphrey, *ibid*, Pt. 4, 2554.

⁴⁰ Arms Control Reporter, 1987, 603.B.108-109.

of "an independent panel" to review the treaty and to make appropriate, albeit nonbinding, recommendations as to how the treaty should be interpreted and applied.⁴¹

(U) As it happened, Levin's letter was merely the first installment on what quickly became a heated series of exchanges between liberal Democrats in Congress and members of the administration on the subject of the ABM Treaty. In addition to his call for an independent review panel, Levin, joined by House Democrats AuCoin and Dicks, introduced nearly identical bills at the outset of the One Hundredth Congress that would have barred any SDI tests that might violate the traditionally accepted interpretation of the ABM Treaty. While the ostensible purpose of these legislative proposals was to guarantee compliance with the country's treaty obligations, it appears that the real reason behind them was to shackle SDI. "If it becomes clear that their intent is to break out of the ABM treaty," Dicks said of the administration in a published interview, "we'll be in a much stronger position."⁴²

(U) A more formidable challenge was that raised by Sen. Sam Nunn. Over the years, even though he had supported SDI, Nunn had also been a persistent critic of the program, often faulting those running it for not paying more attention to near-term deployment options as a precaution against a Soviet breakout from the ABM Treaty. But by 1987, with new and enlarged responsibilities as chairman of the Senate Armed Services Committee and as co-chairman of the congressional Arms Control Observer Group to the Geneva arms talks, Nunn expanded his critique. Amid press reports in early February that the administration was considering a shift to the broad interpretation of the ABM Treaty, Nunn wrote Reagan expressing his concern lest such action "provoke a Constitutional confrontation of profound dimensions." At the least, Nunn argued, a change of policy on the treaty at this point would cause "consternation" among the NATO allies, put "immense pressure on SDI funding," and result in "much deeper SDI cuts than would otherwise occur." To stave off these dire

⁴¹ Ltr, Levin to Shultz, Dec. 1, 1986, SDIO External Affairs, Congressional correspondence file. Emphasis in original.

⁴² Dicks quoted in Congressional Quarterly Weekly Report, Feb. 14, 1987: 271.

consequences, Nunn urged patience on the part of the administration and "a thorough consultative process" with Congress and U.S. allies.⁴³

(U) What Nunn meant by a "Constitutional confrontation" became clearer during the course of three speeches he made on the Senate floor, March 11-13, 1987. Although Nunn's stated purpose was to clear up some of the confusion surrounding the meaning and application of the ABM Treaty, the most immediate consequences were those for SDI. Not only did Nunn reject the validity of the administration's broad interpretation of the treaty, but he did so in terms that left his willingness to muster future Democratic support for SDI obviously conditional upon the administration's continued adherence to the narrow interpretation. In a sense, Nunn could hardly do otherwise. As Sen. J. James Exon said afterwards, "I would suspect that the majority point of view . . . is that breaking out of the treaty is not something most Members of Congress see as a viable option at this time."⁴⁴

(U) Nunn's argument against the broad interpretation revolved around three major points. The first was that the Senate ratification debate of 1972 did not support the administration's "novel doctrine" that space-based testing of defensive weapons systems derived from "other physical principles" was wholly permissible under the treaty, and that all involved in the ratification process recognized it as such at the time. In fact, the treaty itself was rather vague about how far development and testing could go; only deployment (a term not defined, incidentally) was prohibited. However, the terms of the treaty per se were not, in Nunn's view, at issue. Rather, it was the Nixon administration's interpretation of the treaty--and the Reagan administration's contention that a different interpretation could be applied--that aroused his concern. As Nunn reconstructed the record of the ratification proceedings, Nixon administration witnesses had made it clear repeatedly, in testimony and in separately submitted written statements, that the testing limitations in the treaty applied across-the-board to all technologies. And it was on this basis, Nunn argued, that the Senate had given its advice and consent to ratification. That the Reagan administration was now proposing to operate from a different interpretation was, in Nunn's opinion, "a fundamental constitutional

⁴³ Ltr, Nunn to Reagan, Feb. 6, 1987, in Congressional Quarterly Weekly Report, Feb. 14, 1987: 274.

⁴⁴ SCAS, Hearings: DoD Authorization for FYs 1988 and 1989, Pt. 4, 2520.

challenge to the Senate as a whole with respect to its powers and prerogatives" in the treaty-making area.⁴⁵

(U) Nunn's second point followed from his first: that subsequent practice and post-ratification statements by both the United States and the Soviet Union reinforced the validity of the narrow interpretation. Contrary to administration claims that this issue had not come up prior to SDI, Nunn said that he had found ample evidence, based on what the State Department had thus far made available from comments on both the U.S. and Soviet sides, to suggest that it had. While acknowledging that information in this regard was far from complete (the State Department was then in the process of preparing a fresh analysis of the subsequent practices issue), Nunn insisted that he could find no evidence in the "available record" which contradicted the Senate's original understanding of the meaning of the treaty. Since 1972, Nunn added, even the Soviets had "made no objection to the traditional view of the treaty" as it affected testing, though he readily acknowledged that it appeared they had taken liberties with other provisions, most notably those constraining the power and location of radars.⁴⁶

(U) In his final speech of the series, Nunn addressed the record of the 1971-1972 ABM Treaty negotiations, which administration lawyers cited repeatedly as evidence of the broad interpretation's validity. Challenging the administration's position, Nunn said that, as a matter of international law, the negotiating record ranked as "the least persuasive evidence of a treaty's meaning." Since the negotiating record was still classified, Nunn spoke in generalities, omitting specific examples. All the same, he said, "I found no evidence which contradicted the Senate's original understanding of the meaning of the treaty." Nunn did acknowledge that, as others had pointed out, the negotiating record contained ambiguities. But, he insisted: "These ambiguities are not . . . of sufficient magnitude to demonstrate that the Nixon administration reached one agreement with the Soviets and then presented a different one to the Senate." Summing up, Nunn said that the

⁴⁵ U.S. Congressional Record, Mar. 11, 1987: S 2967-2973.

⁴⁶ *Ibid*, Mar. 12, 1987: S 3090-3095.

administration was "wrong in its analysis of the Senate ratification debate, wrong in its analysis of subsequent practice . . . and wrong in its analysis of the negotiating record itself."⁴⁷

(U) Though obviously shaken and irritated by Nunn's attack, administration officials sought to minimize the damage. Backtracking from his earlier position, Sofaer now conceded that his original analysis of the ratification proceedings had been flawed, an error he attributed to "young lawyers" on his staff who had conducted an "incomplete review." But he still maintained that the broad interpretation was valid and legally sound. Richard Perle, Assistant Secretary of Defense for International Security Policy, concurred that there was no real basis for doubting the broad interpretation. Recalling his experiences as an aide to Sen. Henry M. Jackson during the 1972 debate, Perle said: "The questions . . . to which Sen. Nunn refers were of such minor interest [at that time] that it was all we could do to get people to come to the hearings."⁴⁸

(U) In addition to widening his differences with the administration, Nunn's assault helped to scuttle a tentative compromise on the ABM Treaty and SDI funding that a bipartisan group of senators, headed by Albert Gore (D., Tenn.), had worked out earlier with Perle, arms control adviser Paul H. Nitze, and Max M. Kampelman, the senior U.S. negotiator at the Geneva arms talks. The other senators involved in arranging the deal were the chairman of the Foreign Relations Committee, Claiborne Pell (D., R.I.), Arlen Specter (R., Pa.), Ted Stevens (R., Alaska), Richard Lugar (R., Ind.), and Dan Nickles (R., Okla.), all members of the Arms Control Observer Group. Following a meeting on March 2, the two sides announced preliminary agreement on a compromise under which the Senate would support a "respectable level" of SDI funding (\$4 billion was the figure sometimes mentioned) and defer any legislative action endorsing or otherwise compelling the administration to observe the narrow interpretation of the ABM Treaty. The administration, in return, would postpone for up to eighteen months any tests that might violate the narrow interpretation, and use this time to explore with the Soviets at Geneva "an appropriate way" of limiting future SDI-type research.⁴⁹

⁴⁷ *Ibid*, Mar. 13, 1987: S 3171-3173.

⁴⁸ Congressional Quarterly Weekly Report, Mar. 14, 1987: 458.

⁴⁹ Arms Control Reporter, 1987, sec. 575.B, pp. 208-209.

(U) But in the aftermath of Nunn's speeches the prospects for such a compromise soured. Not only was Secretary of Defense Weinberger reported to be skeptical of the deal because of the restraints it would impose on SDI, but also, leading arms control lobbyists on Capitol Hill, sensing a falling off of congressional support for SDI, worked to thwart the compromise in the expectation of wringing more concessions. "We're in a position," said one lobbyist, "to block much of what they [administration officials] want to do without giving them a whole lot of money."⁵⁰

(U) Adding to the increasingly confrontational atmosphere, the Senate Foreign Relations and Judiciary Committees in March and April held a series of well-publicized--and sometimes emotional--joint hearings on the ABM Treaty interpretation issue. The only administration representatives to testify were Perle and Sofaer, who appeared together on March 26 to defend the broad interpretation and to promote SDI. As Perle characterized it, the whole controversy over the treaty's meaning was the result of a misconception. Though Perle acknowledged that American negotiators in 1971-72 had been under instructions to secure prohibitions on "exotic" or "futuristic" (i.e., SDI-type) defensive weapons, he insisted that there was no solid evidence in the negotiating record that they had been successful, despite claims of having done so by chief negotiator Gerard Smith and others. Now, Perle argued, in attempting to "shackle" the administration with the narrow interpretation and limited funding, opponents of SDI were in effect out to cripple it and would "in time destroy this vital program to defend against ballistic missiles."⁵¹

(U) Sofaer was equally direct, arguing that it was not up to the Senate or Congress as a whole to interpret treaties anyway. "When [the Senate] gives its advice and consent to a treaty," he said, "it is to the treaty that was made, irrespective of the explanations it is provided." From this it followed, Sofaer contended, that the administration was under no obligation to adhere to the narrow interpretation. Rather, it was free to interpret the treaty as it saw fit, no matter what Congress may have been told earlier. But to Sen. Joseph Biden (D., Del.), chairman of the Judiciary Committee

⁵⁰ Mike Mawby of Common Cause, quoted in Congressional Quarterly Weekly Report, Mar. 14, 1987: 459; for Weinberger's opposition, see New York Times, Mar. 15, 1987:

⁵¹ U.S. Congress, Senate, Committee on Foreign Relations and Committee on the Judiciary, Joint Hearings: The ABM Treaty and the Constitution, 100:1 (Washington, D.C.: G.P.O., 1987), 121, 138-142.

and an aspirant for his party's presidential nomination, it was "incredible" and "absolutely staggering" that the Senate's constitutional treaty-making prerogatives should be regarded in what he considered such a cavalier fashion.⁵² Sen. Patrick Leahy, seizing on the practical implications, worried that the administration's position was the start of a campaign "to do away with the ABM Treaty," which he described as the "only meaningful agreement now in existence" limiting strategic nuclear arms between the United States and the Soviet Union. "I think that we have a special duty in the Senate," Leahy added, "to make sure that [the ABM Treaty] is not trashed by the administration, which has trashed virtually every other gain in the arms control process over the past 15 years."⁵³

(U) Not all of Leahy's colleagues on the committees, however, agreed that the situation had reached such a dire point or even that the ABM Treaty was such a valuable asset. Sen. Strom Thurmond, who had recently returned from meetings in Moscow with Soviet leader Gorbachev, thought the Russians were "scared to death" of SDI, and that it would therefore buttress the U.S. strategic position to adopt the broad interpretation.⁵⁴ Sen. Gordon J. Humphrey (R., N.H.) concurred, though he also thought that by failing to make a more forceful and persuasive case for SDI, the administration had delivered it "into the hands of murderous midwives." "By saying that the ABM Treaty permits testing and deployment [sic] of SDI while at the same time constraining testing and development," Humphrey said, "leaves the American people confused." One result, he concluded, was that SDI's opponents were now in the position of being able "to define the debate."⁵⁵

(U) Despite the outpouring of opinions and sentiment, these hearings were largely inconclusive. Indeed, the only substantive accomplishment was the introduction by Biden of yet another resolution requiring the administration to abide by the narrow interpretation of the ABM Treaty. Nonetheless, it was increasingly clear that, by seizing on the ABM Treaty issue, opponents of SDI had exposed a critical weakness in the administration's case for stepping up the pace of the

⁵² *Ibid*, 130.

⁵³ *Ibid*, 145-146.

⁵⁴ *Ibid*, 134.

⁵⁵ *Ibid*, 148-149.

program. In the ensuing battle over SDIO's FY 1988 budget, it would be the fate of the ABM Treaty, as much if not more than the future of SDI, that would be in the forefront Congress's attention. Even many who said they supported SDI would tend to give preservation of the treaty priority, not only because of its practical and symbolic importance for arms control, but also because it seemed the safe position politically.

House Debate on the FY 1988 Budget

(U) With Democrats now controlling both houses of Congress, senior administration officials fully expected SDIO's FY 1988 budget request to be cut, even more severely than it had been in previous years when the Republicans had held the Senate. What they did not anticipate were the size and form these cuts would take, and the added constraints that Congress would try to impose on the program. This, in turn, posed a significant complication in view of the Defense Acquisition Board's decision in July 1987--while SDIO's budget was still pending--to approve six SDI component programs, including the controversial space-based kinetic-kill vehicle system, for tentative technology validation, the first step toward engineering development and deployment. The result was not only increased tension between Congress and the administration, but also a wearing test of will over who would prevail.

(U) As in the past, opposition to SDIO's budget request was strongest in the House, where partisan politics clearly ruled the mark-up of the FY 1988 authorization. Meeting in closed session on April 2, the Research and Development panel of the House Armed Services Committee voted along party lines to pare the President's budget by \$2 billion, bringing it down from \$5.2 to \$3.2 billion. At the same time, Democrats on the subcommittee added two controversial amendments to the authorization bill: one, a proviso sponsored by Armed Services Chairman Les Aspin, mandating continued compliance with the ABM Treaty's narrow interpretation; the other, a ban proposed by Rep. Frank McCloskey (D., Ind.) on development and testing of any kinetic-kill vehicle weapons systems and a ceiling of \$52.8 million for KKV research. According to press reports, McCloskey's action reflected a growing belief on Capitol Hill, especially among liberal Democrats, that KKV's

were not a new weapons system derived from "other physical principles," as the administration claimed, but rather that they were similar in design to an ABM system of the early 1960s called BAMBI (see Chapter I), and that their development and testing therefore would constitute a violation of the ABM Treaty.⁵⁶

(U) Faced with this unexpected surge of support for a KKV ban, Abrahamson lobbied personally for continued funding of all kinetic-kill research, pointing out that these weapons were, and always had been, "essential elements to any effective BMD system."⁵⁷ Reluctant to single out one of several hundred different programs and risk being accused of "micromanagement," the full committee on April 7 adopted a measure proposed by Republican Jim Courter of New Jersey, one of the House's strongest advocates of SDI, to delete the McCloskey amendment. However, Courter was unable to convince his colleagues to drop Aspin's ABM Treaty interpretation amendment as well. Nor did he have any luck when he tried to raise the authorization to \$4 billion. The committee also rejected an amendment by Democrat Charles E. Bennett of Florida to reduce the SDI budget to just under \$2.85 billion, and finally settled on a figure of \$3.5 billion. Of this amount the committee earmarked \$200 million for the Air Force's Boost Surveillance Tracking Satellite (BSTS), an advanced early warning system, which the committee considered an independent requirement from SDI. The remaining \$3.3 billion for SDIO was essentially the same as Congress had appropriated for FY 1987, with a three percent increase to cover inflation. In explaining its decisions, the committee cited two primary concerns: first, the growing size of the SDI budget relative to other military R&D programs; and second, its concern that "... the Administration appears to be configuring the SDI program for an early deployment decision contrary to the previously stated objectives of this program." Seeking a clearer picture, the committee wanted the Secretary of Defense to provide, no later than March 1

⁵⁶ Congressional Quarterly Weekly Report, Apr. 4, 1987: 614-615. Also see R. Jeffrey Smith, "Is BAMBIE Homing In on 'Star Wars' Testing," Washington Post, Apr. 2, 1987.

⁵⁷ Ltr, Abrahamson to Anthony R. Battista, Professional Staff Member, HCAS, Apr. 3, 1987, SDIO External Affairs, Congressional Correspondence file.

of the following year, a detailed breakdown of the SDI budget for the next two fiscal years, along with a total funding projection for each year of the five-year defense plan.⁵⁸

(U) House floor consideration on the authorization bill occurred in two phases. During the first, on May 6, the House debated a motion by conservative Republican Duncan Hunter of California, a member of the Armed Services Committee, to strike the Aspin amendment requiring administration compliance with the narrow interpretation of the ABM Treaty. To buttress his case, Hunter cited a recent speech by the administration's senior arms control adviser, Ambassador Paul H. Nitze, who had helped negotiate the ABM Treaty in 1972. According to Nitze, Hunter said, U.S. negotiators did attempt to achieve a complete ban on the development and testing of space-based and other mobile devices capable of substituting for ABM components. But they succeeded only in imposing a ban on deployment, not on the creation of such systems. This shortcoming, Hunter maintained, effectively rendered the narrow interpretation suspect and argued instead for a less restrictive reading of the treaty.⁵⁹

(U) The ensuing debate was brief, but intense. Joining in support of Hunter's motion, Courter, who had recently tried but failed to have the Aspin amendment stricken in committee, now denounced the ABM Treaty as contrary to America's best interests because it left the country defenseless to a ballistic missile attack "whether it be launched by design or by mistake." To Rep. Jon Kyl (R., Az.), the Aspin amendment was simply an easy way out for those who opposed SDI but did not want to declare themselves. "If you wanted to kill SDI without having the courage to come out publicly against SDI," he said, "this is a perfect way to stop it." But Rep. Thomas J. Downey of New York, a liberal Democrat, disagreed, attributing the dispute over the ABM Treaty instead to conservatives who had let "a debate about ideology run amok." With little or no possibility of any effective system being ready for full deployment in the next ten years or more, Downey deemed it "insane" to risk jeopardizing the ABM Treaty, a view shared by others. Despite a threat from the

⁵⁸ H. Rpt. No. 100-58: 142-144; Congressional Quarterly Almanac, 1987, 202.

⁵⁹ Congressional Record, May 6, 1987: H 3226. Also see Paul H. Nitze, "Interpreting the ABM Treaty: Speech to the Johns Hopkins School of Advanced International Studies," Apr. 1, 1987, Nitze Papers, L.C.

White House that President Reagan might veto the entire defense authorization bill if the Aspin amendment stayed in, Hunter's motion to kill it lost overwhelmingly, 159 to 262, with 34 Republicans part of the majority.⁶⁰

(U) By the time debate resumed on May 12, SDI's fortunes had taken a further turn for the worse. First, the House had again pared the SDI authorization, from \$3.5 to \$3.3 billion, in order to conform to the House budget resolution requiring \$17 billion in spending reductions spread throughout the DoD budget. Moreover, it was increasingly apparent that the White House's legislative strategy was to play down any plans for phased deployment (and, accordingly, any imminent need for the broad interpretation) in order to avoid an open confrontation with SDI's congressional enemies. This approach reflected the influence and thinking of Nitze and Secretary of State Shultz, supported by national security adviser Frank C. Carlucci and White House chief of staff Howard Baker, all of whom attributed SDI's mounting troubles in Congress in large part, if not entirely, to Weinberger's aggressive promotion of the program. For some time all four had been warning Reagan that if the administration pressed the deployment issue too hard, it might provoke a backlash among moderates and open the way for the Democratic majority to make deep cuts in the SDI budget. Persuaded that this was the course to follow, Reagan now continued to back SDI with rhetoric, but little else.⁶¹

(U) This turn of events left many House proponents of SDI, including Courter, Jack Kemp of New York, and other conservative Republicans, feeling confused, thwarted, and disappointed. With no effective leadership from the White House, they found it virtually impossible to rally and sustain support for SDI, and wound up steadily giving way to the opposition. In all during the debate on May 12, the House considered 12 amendments to the SDI portion of the authorization bill, including four spending amendments. Two of these never rated serious consideration and went down

⁶⁰ Congressional Record, May 6, 1987: H 3233-3239.

⁶¹ Author's interview with Carlucci, Sept. 9, 1991; Congressional Quarterly Weekly Report, Apr. 4, 1987: 614; and Strobe Talbott, The Master of the Game: Paul Nitze and the Nuclear Peace (N.Y.: Alfred A. Knopf, 1988), 349-350. Also see Paul H. Nitze, with Ann M. Smith and Steven L. Rearden, From Hiroshima to Glasnost: At the Center of Decision--A Memoir (N.Y.: Grove Weidenfeld, 1989), 445-446.

to easy defeat. They included another so-called "kamikaze amendment," cosponsored by California Democrats Ronald Dellums and Barbara Boxer, to eviscerate the program by limiting it to laboratory research, abolishing SDIO, and reducing program funding to \$1.16 billion; and an effort by Joel Hefley (R., Colo.) to increase SDI to \$4 billion. The Dellums-Boxer amendment lost by 105 to 307, while the Hefley amendment went down 129 to 286, with 56 Republicans voting in the majority.⁶²

(U) The two spending amendments with the best chances of passing were a measure put forth by Republican John G. Rowland of Connecticut, urging authorization to \$3.55 billion, about the same as the Armed Services Committee's original mark; and an amendment cosponsored by Democrat Charles Bennett and Republican Tom Ridge of Pennsylvania, identical to the one Bennett had proposed in committee, reducing the authorization to \$2.8 billion. In assessing the prospects of these measures, Rep. Vic Fazio (D., Calif.) guessed that most House members were prepared to accept a final figure as high as \$3.6 to \$3.8 billion "as a reasonable amount to spend for a robust program."⁶³ But Rep. Benjamin L. Cardin (D., Md.), citing the recently released report on lasers by the American Physical Society, thought that defensive technologies were still too unproven for the House to accept spending more than \$3.1 billion.⁶⁴ With the weight of opinion for the moment more inclined toward Cardin's view than Fazio's, the Rowland amendment, supported by 50 Democrats and all but 17 voting Republicans, fell short by six votes, 207 to 213.⁶⁵

(U) In the end, it was the House's desire for bargaining leverage with the Senate that resulted in the Bennett amendment being adopted. Just four days earlier, the Senate Armed Services Committee had released its report on the defense spending bill (see below) recommending an SDI authorization of \$4.120 billion, about 25 percent more than was in the bill before the House. Repudiating his committee's earlier action, Aspin said he now endorsed the Bennett amendment "purely [as] a matter of tactics" because he wanted to go into the House-Senate conference with as

⁶² Congressional Record, May 12, 1987: H 3431-3436.

⁶³ *Ibid*, H 3440.

⁶⁴ *Ibid*, H 3440-3441.

⁶⁵ *Ibid*, H 3442.

low a figure as the House would accept in the expectation of splitting the difference. Although there was no assurance, as Republican William Dickinson of Alabama pointed out, that the Senate would approve the committee's figure, House Democrats were skeptical. With the help of 20 Republican votes--the margin of victory, as it turned out--brought along by Ridge, the Bennett amendment passed, 219 to 199.⁶⁶

(U) Having lost ground in the spending battle, SDI supporters sought to register their discontent, not only with their colleagues, but also with the White House, over the direction the program appeared headed. In what he later termed "a consciousness-raising effort," Kemp offered an amendment that would have required the administration to initiate full-scale engineering and development of a first-phase SDI by 1993. While conceding that his amendment stood little chance of passing, Kemp said that he wanted to send a signal to the administration that the debate over SDI deployment was "not a technological debate, it is a political debate." But as Kemp himself had predicted, his amendment failed (121 to 302), as did a similar measure offered by Courter to begin development of a system of defense against accidental launches.⁶⁷

(U) All in all, the House debate was inconclusive insofar as establishing where majority opinion in the lower chamber stood on SDI. While most members were still prepared to support the program as a research measure, they were clearly uneasy over the looming prospect of deployment and the complications this would pose for the ABM Treaty. The strong showing of support for the Aspin amendment reflected the intensity of these concerns. Despite the treaty's flaws and imperfections, most House members continued to regard it as an important contribution to arms control and hence to U.S. security. Because of the technical problems that SDI still faced, even with the progress that the administration claimed was being made, there was as yet little enthusiasm for taking steps that might lead to scrapping the treaty. Other than to its most die-hard congressional supporters, SDI did not appear at this stage, at least, a viable alternative to continue living under the ABM Treaty regime. Even so, this reticence and caution did not mean that House members were

⁶⁶ *Ibid*, H 3445-3447.

⁶⁷ *Ibid*, H 3448, 3455, 3464-3465.

any less supportive of SDI than they had been in the past or that they might abandon the program. Rather, as Les Aspin saw the situation, the House's actions suggested that what most members wanted was to "keep the [SDI] program on hold" in order to "see what a new administration is going to do."⁶⁸

Impasse in the Senate

(U) Like the House, the Senate initially moved quickly in early May on the defense spending bill in hopes of getting it out of the way with fewer delays than in the past. This was Nunn's first defense authorization as chairman of the Armed Services Committee, and as such it promised to be a precedent-setting test of his leadership ability. Nunn's prestige and credibility among fellow senators were on the line. But with Nunn and the Reagan White House increasingly at odds over SDI because of their differing perspectives on the ABM Treaty, Senate proponents of SDI--drawn overwhelmingly from the ranks of conservative Republicans--saw an opportunity to further their cause and, at the same time, force the administration into the confrontation it had side-stepped in the House. The result was an impasse that left the defense authorization bill dangling for months and members of Congress on both sides of the debate ultimately more frustrated than ever.

(U) The precipitating cause of the clash was an amendment, cosponsored by Nunn and fellow Democrat Carl Levin, to the Senate Armed Services Committee's version of the FY 1988 defense authorization bill. Having repeatedly criticized the administration's broad interpretation of the ABM Treaty, Levin and Nunn sought to turn their words into action by including in the bill a two-year prohibition on the expenditure of funds by SDIO for testing or development of space-based or mobile ABMs unless Congress specifically approved such actions by joint resolution.⁶⁹ Technically, as Levin and Nunn liked to point out, this was a procedural measure designed to give Congress more voice in the program; it did not necessarily prejudge the merits, purpose, or legality of testing. Nor, like the Aspin amendment passed by the House, did it necessarily require the administration to

⁶⁸ Quoted in Congressional Quarterly Weekly Report, May 16, 1987: 974.

⁶⁹ S. Rpt. No. 100-57: 121-122.

adhere to one interpretation over another. "We designed it," Levin insisted, defending the amendment, "in such a way that we could meet the argument that it was premature to make a decision as to the correct interpretation."⁷⁰ But as the authors were well aware, the effect, were the amendment to become law, would be to give Congress a veto over the program, a veto that the Democratic majority in either house would almost surely use for coercive purposes. "I think there are some people in the State Department and in the White House," Nunn said, issuing a thinly veiled warning, "who need to do some rethinking about where the slippery slope of ABM reinterpretation is leading"⁷¹

(U) To soften the blow of the Levin-Nunn amendment the committee recommended an SDI authorization of \$4.120 billion, 20 percent less than the President had requested but substantially more than the House was prepared to allow.⁷² Even so, opposition to the amendment was perhaps stronger than the authors expected. Of the nine Republicans on the committee, eight voted against the amendment. To register their disgust even further, they voted against the entire defense authorization bill, condemning it solely for including the Levin-Nunn amendment, which they characterized as "a unilateral constraint on the United States" and an assault on "the best interests of our national security."⁷³ As a harbinger of the larger conflict to come, Senators Robert Dole of Kansas, the minority leader, and John W. Warner of Virginia, the senior Republican on the Armed Services Committee, sent a letter to President Reagan urging him to veto the defense authorization bill if it included the Levin-Nunn language. Thirty-four senators, just the number needed to uphold a veto, signed the letter.⁷⁴

(U) From this point on, the normal scenario would have been for the Senate to debate the measure, pass a bill with the Levin-Nunn amendment attached, go into conference, and emerge, after

⁷⁰ National Journal, June 27, 1987.

⁷¹ "Nunn Threatens INF Pact With Link to ABM Treaty," Aviation Week & Space Technology, May 11, 1987: 30.

⁷² S. Rpt. No. 100-57: 120.

⁷³ *Ibid*, 227-228.

⁷⁴ Washington Post, May 9, 1987: A12.

consultations with the White House, with a compromise that all involved could proclaim as victory. But after the whipping SDI supporters took in the House, proponents in the Senate were determined not only to rally their colleagues behind them but also to force the administration to fight for its program. On May 13, employing an obscure parliamentary rule that allowed senators to be excused from voting and to interrupt a roll call to explain why, Senate Republicans launched a filibuster that effectively bottled up the defense appropriations bill for the rest of the summer.⁷⁵ This was precisely the kind of confrontation the administration had hoped to avoid. But it was one that SDI's congressional supporters relished. From the standpoint of SDIO and the White House, however, events were rapidly moving out of control.

(U) Amid reports of behind-the-scenes efforts to find a compromise, the impasse continued, with Reagan now publicly committed to vetoing the defense authorization bill if it retained the offending amendment. Nunn's immediate reaction, using the most effective weapon at his disposal, was to threaten to rework the authorization and come up with even deeper cuts in SDIO's requested budget, unless the administration assured Congress of a part in deciding policy on SDI testing.⁷⁶ But the longer the dispute dragged on, the more skeptical he became that Congress would be able to pass a defense authorization bill. As a rather unorthodox alternative solution, he notified Warner on June 18, 1987, that he was directing the Armed Services Committee's majority staff to begin preliminary consultations with the House committee's staff in an effort to resolve differences and provide a substitute for legislation. "If we do not get an authorization bill because of the filibuster or because of a veto," Nunn said, "the staff negotiations, if ratified by a majority of the House and Senate Committees, would be forwarded to the Appropriations Committees as a final recommendation by our Committee on these issues."⁷⁷

(U) Unable to make progress on SDIO's FY 1988 authorization because of the impasse in the Senate, Congress turned its attention to the administration's supplemental request of \$500 million to

⁷⁵ See Congressional Record, May 13, 1987: S 6348-6350.

⁷⁶ Congressional Quarterly Weekly Report, May 23, 1987: 1064.

⁷⁷ Ltr, Nunn to Warner, June 18, 1987, SDIO External Affairs, Cong. correspondence file.

the FY 1987 budget. As it happened, the only part of the request to receive serious consideration was that relating to research and development for a heavy-lift launch vehicle, which could be used either by NASA for space exploration, or by SDIO for deployment of space-based defenses. Funding for the heavy-launch vehicle, along with several other space-related measures, made up about half of the supplemental request. The Senate voted \$131 million, while the House turned down the entire proposal. Out of the ensuing conference emerged a compromise, approved by the House in late June and by the Senate in early July, giving the heavy-launch vehicle program (termed an Advanced Launch System, or ALS) a total of \$75 million, of which \$38 million was to be transferred to NASA. Further, at the insistence of the House conferees, Congress barred any use of these funds for research and development intended to facilitate early deployment of a ballistic missile defense system.⁷⁸

(U) Meanwhile, on July 10, 1987, Secretary of Defense Weinberger forwarded to Congress his annual "heartburn" letter that singled out pending legislative measures to which he objected.⁷⁹ Due to an apparent oversight, his comments concerning the status of SDI failed to make any mention of the controversial Levin-Nunn amendment, an omission that Nunn seized upon as suggesting a change in administration policy.⁸⁰ Weinberger, however, categorically denied that this was the case. On September 8 he advised Nunn of his "continued and strong opposition to your and Senator Levin's amendment and to the similar provision in the House bill." Weinberger characterized the Levin-Nunn amendment not only as a hindrance to SDI but also as a barrier to a breakthrough in the Geneva START talks. "If the Soviets come to believe," the secretary warned, "that the Congress will serve up unilateral concessions such as those proposed in your and Senator Levin's amendment, they will have little incentive to reach agreements on deep reductions in offensive nuclear arms." Summing up, Weinberger concluded that the Levin-Nunn amendment would make for "bad law and bad national security policy."⁸¹

⁷⁸ H. Rpt. No. 100-195, pp. 28-30.

⁷⁹ See Ltr, Weinberger to Rep. William L. Dickinson, July 10, 1987, SDIO External Affairs, Cong. correspondence file.

⁸⁰ Congressional Record, Aug. 7, 1987: S 11546-11547.

⁸¹ Ltr, Weinberger to Nunn, Sep. 8, 1987, SDIO Director's Chron. file.

Figure VI-2
SUMMARY OF
CONGRESSIONAL ACTION ON THE
FY 1987 SUPPLEMENTAL
(\$ in millions)

President Requested	\$ 500
Senate-passed Appropriation	131
House-passed Appropriation	0
Conference Agreed to Appropriate	75
Less NASA Transfer	-38
Net SDIO	37

Source: H. Rpt. No. 100-195: 28-30.

(U) Despite Weinberger's disclaimers, administration opposition was wearing thin. On September 15, 1987, with the end of the fiscal year just two weeks away, Republicans finally ended their filibuster. This paved the way for a vote two days later on a motion by Warner to delete the Levin-Nunn amendment. But after the skirmishing of the previous few months, the ensuing debate was anticlimactic, as the Senate voted 58 to 38 to retain the Levin-Nunn restrictions. What was surprising was not only the lopsidedness of the vote, but also that eight Republicans deserted the President to vote with the majority. Only one Democrat--Ernest Hollings of South Carolina--supported the Warner amendment.⁸²

(U) Losing on the Levin-Nunn amendment was merely the first of several setbacks the Senate dealt the administration on SDI. On September 22 the Senate debated a proposal by Democrat Johnston of Louisiana to trim the authorization to \$3.7 billion, instead of the \$4.120 billion in the Armed Services Committee's bill. Johnston had tried in previous years to cut SDI's budget, but his efforts had always come up a few votes short. This time, with a Democratic majority in the Senate, his prospects were significantly improved. In fact, the Senate proved to be evenly divided on the measure, voting 50 to 50, with Vice President George Bush casting the deciding vote to kill the proposal.⁸³ All the same, the administration's victory was short-lived, for in resolving differences between the House's version of the authorization bill and the Senate's, the conference committee came up with a figure of \$3.621 billion, which both chambers ultimately accepted as the appropriation.⁸⁴ Figure VI-2 summarizes the legislative action.

(U) Finally, on September 29 the Senate approved the creation, albeit within carefully structured bounds, of an SDI Institute (SDII), or "think tank," to provide scientific and other technical support for the program. Blocking the institute had become a personal cause celebre for Senator Carl Levin, who had even gone so far as to call a special hearing on the subject the previous May. Levin acknowledged that SDIO needed scientific and technical advice, but he saw the

⁸² Congressional Record, Sep. 17, 1987: S 12243.

⁸³ *Ibid*, Sep. 22, 1987: S 12470.

⁸⁴ H. Rpt. No. 100-446: 39, 593; and H. Rpt. No. 100-498: 659.

administration's proposal of a special institute as designed to "provide only a scientific fig leaf" over circumventing civil service salary and hiring practices.⁸⁵ Under a compromise worked out between Levin and Warner, existing think tanks would have first claim on contract bids for the new institute, while the actual operation of the organization would be separated insofar as possible from SDIO. The House, which had no similar provision in its version of the authorization bill, essentially concurred with the Senate's treatment of the problem.⁸⁶

The Budget Summit Agreement and Its Implications

(U) Having wrestled for months to reach a consensus on SDI, Congress was glad to be rid of the issue when on November 19, 1987, it finally sent the FY 1988 defense authorization bill to the White House, thus opening the way for passage of an appropriations resolution later the following month. The compromise leading to the authorization was the handiwork of a budget summit between a group of White House aides, including Secretary of Defense-designate Carlucci, and the four senior members of the armed services committees--Aspin and Dickinson for the House, and Nunn and Warner for the Senate.

⁸⁵ U.S. Congress, Senate, Committee on Governmental Affairs and Committee on Armed Services, Joint Hearings: Need for and Operation of a Strategic Defense Initiative Institute, 100:1 (Washington, D.C.: G.P.O., 1987), 6.

⁸⁶ H. Rpt. No. 100-446: 41-43, 596.

Figure VI-3
SUMMARY OF CONGRESSIONAL ACTION
ON THE FY 1988 SDIO BUDGET
(\$ in millions)

President Requested	\$ 5,221
House-passed Authorization	2,846
Senate-passed Authorization	4,120
Congress Authorized	3,621
House-passed Appropriation	2,846
Senate-passed Appropriation	3,621
Congress Appropriated	3,621

Sources: H. Rpt. No. 100-446: 593; H. Rpt. No. 100-498: 659

(U) A major aim of the budget summit was to help control the growing deficit, and this meant reductions in spending. As mentioned above, the conferees agreed to authorize \$3.621 billion for SDI in FY 1988. This was a net increase of about 13 percent over SDIO's FY 1987 appropriation, but fully 30 percent less than the President had requested. As part of the deal, Carlucci accepted an overall budget reduction package that would trim the FY 1989 defense budget by \$33 billion, including a cut of \$1.7 billion in SDIO's planned request.⁸⁷ The timetable and spending projections outlined in the 1983 Fletcher report were now assuredly obsolete, making a decision on possible deployment all that much harder to predict. In assessing the damage, SDIO's Deputy Director Gordon A. Smith estimated that the program's demonstration and validation projects would experience unavoidable delays, though just how crippling these might prove to be could not yet be determined.⁸⁸

(U) The most difficult part of the budget summit was to reconcile the differing language of the Aspin amendment in the House bill and the Levin-Nunn amendment in the Senate version. As a face-saving gesture for the President, the conferees agreed to drop both amendments in favor of a provision requiring that all appropriated funds through FY 1988 be spent in a manner consistent with the SDI plan presented to Congress in SDIO's annual report of April 1987.⁸⁹ The operating language was a declaration in Appendix D to the report that: "Since the President has decided as a matter of policy to observe the more restrictive interpretation of the ABM Treaty, all statements in this appendix regarding compliance with treaty provisions should be understood to be based on the more restrictive interpretation."⁹⁰ In adopting this position, the conferees were in effect reaffirming the support of Congress for the narrow interpretation of the treaty, as both houses had so indicated.

⁸⁷ "Summit Agreement Between the President and the Joint Leadership of Congress," Congressional Record, May 11, 1988: S 5446; Ltr, Carlucci to Aspin, n.d., SDIO External Affairs, Congressional Correspondence file.

⁸⁸ Memo, Smith for SecDef, Oct. 9, 1987, sub: SDI Program--Action Memo, SDIO Director's Chron. file.

⁸⁹ See H. Rpt. No. 100-446: 40-41, 594-595.

⁹⁰ U.S. Strategic Defense Initiative Organization, Report to the Congress on the Strategic Defense Initiative, 1987 (April 1987), p. D-2.

But they left the appearance that Congress was not coercing the President into doing something against his will. Rather, Congress was simply reaffirming stated administration policy.

(U) Reagan, for his part, took this setback in stride and chose to look on the brighter side. In a speech on arms control on November 23, he repeated his commitment to SDI, including his support for eventual deployment. "SDI is not a bargaining chip," he insisted. "It's a cornerstone for our security strategy for the 1990s and beyond. We will research it. We will develop it. And when it's ready, we'll deploy it. Just remember this: If both sides have defenses, it can be a safer world."⁹¹

(U) Nonetheless, it was more unclear than ever how far Congress was prepared to go to realize the President's vision. This reflected not only the political realities of a Congress now fully controlled by the opposition party, but also a general erosion of congressional support for SDI, especially in the Senate, due mainly to concerns for the ABM Treaty. Thus far, Senate support of the program had sustained it against the cuts mandated by the House. But with Senate support also falling off, the administration was increasingly on the defensive. Reagan might continue to champion eventual deployment, but among SDI's more ardent congressional promoters, doubts were beginning to build. Although there was little prospect that Congress would close down the program, it was abundantly apparent that SDI's days of growth were nearing an end. In all likelihood, Ronald Reagan would leave office with the ultimate fate of SDI unresolved.

⁹¹ "Remarks to Administration Supporters at a White House Briefing on Arms Control...," Nov. 23, 1987, Public Papers of the Presidents of the United States: Ronald Reagan, 1987 (Washington, D.C.: G.P.O., 1989), 1375.

CHAPTER VII

MARKING TIME (1988-1989)

(U) For the political future of the Strategic Defense Initiative the last year of Ronald Reagan's presidency was anticlimactic, a period of marking time until the next administration came into office and decided how to proceed. What had begun five years earlier with Reagan's dramatic speech that he hoped would usher in a new era of strategic stability in which ballistic missiles would be rendered "impotent and obsolete" was, by 1988, a program mired in annual congressional budget battles and hamstrung by congressionally-mandated restrictions and limitations on testing and development. For supporters of SDI the outlook was not encouraging. According to Reagan, the program was at least one to two years behind schedule.¹ But according to the director of SDIO, Lt. Gen. James A. Abrahamson, the slippage was even greater. Instead of the mid-1990s, as he had once predicted, he now saw a deployment decision in 1997 or 1998 at the earliest.²

(U) Nonetheless, Reagan remained steadfastly committed to SDI. For FY 1989 he wanted slightly more than \$4.5 billion for the program, an increase of nearly 25 percent over the previous year's appropriation, but a reduction of \$1.7 billion from the amount projected at the time of the FY 1988 budget submission (see Chapter VI, Figure VI-1). The reason for the reduction was the budget summit agreement of November 1987, under which the administration agreed to pare defense spending by some \$33 billion, with SDI included in the cutback. However, as Deputy Secretary of Defense William Howard Taft IV pointed out, SDI was one of several high priority defense programs

¹ "Remarks to the Institute for Foreign Policy Analysis at a Conference on SDI," Mar. 14, 1988, Public Papers of the Presidents of the United States: Ronald Reagan, 1988 (Washington: G.P.O., 1990), 331.

² Abrahamson testimony, Apr. 18, 1988, U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1989, 100:2 (Washington: G.P.O., 1988), Pt. 6, 724-725.

that the administration thought should be exempt from any further reductions. Even within the confines of restricted spending limits, the administration continued to accord SDI privileged status.³

(U) Whether Congress would reciprocate these feelings remained to be seen. As a lame duck chief executive Reagan necessarily had less power and influence with Congress than he had exercised at the outset of his presidency seven years earlier. This, coupled with the setbacks of the 1986 election, which had restored a Democratic majority in the Senate, and closer Democratic party unity, especially in the House, seemed to suggest that Reagan's political clout was ebbing. According to a year-end analysis by Congressional Quarterly, a nonpartisan Capitol Hill reporting organization, Reagan won only 43.5 percent of the 177 roll-call votes on which he had staked a position in 1987, compared with 56.1 percent in 1986. It was the lowest success rate of any president since Congressional Quarterly began its voting studies in 1953. Many of the setbacks reflected purely partisan voting patterns, but a sizable number occurred as a result of Republican defections owing to differences with the President over policy. In 16 of 34 crucial votes in the Senate, Reagan failed to receive support from even half the Republicans.⁴

(U) It was unlikely that, in the final year of his presidency, Reagan's prospects would improve significantly, if at all. Not only was 1988 another election year, it was a presidential election year as well, which tended to bring out a higher percentage of voters than off-year elections. In these circumstances, House and Senate incumbents running for another term were prone to be cautious. In particular, they did not want to appear overly supportive of increasingly expensive programs like SDI, though because of its popularity, as measured by opinion polls, most did not want to appear opposed to it either. At the same time, liberal opponents of the program and other congressional critics were as determined as ever to check its growth and steer it away from programmatic decisions that would open the way to eventual deployment. Even so, SDI retained a

³ Taft testimony, Mar. 3, 1988, in U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1989, 100:2 (Washington: G.P.O., 1988), Pt. 1, 33.

⁴ "Reagan's Clout in Congress Falls to Record Low," Congressional Quarterly Weekly Report, Jan. 16, 1988: 91-96.

core of committed believers in Congress--most of them conservative Republicans--who were prepared to fight for the program and make it the centerpiece of future American defense policy.

Personnel and Program Changes

(U) As determined as Reagan remained to see SDI through to fruition, there were fewer and fewer key advisers who fully shared his vision. In fact, by 1988, the number of dedicated SDI supporters within the administration had dwindled considerably, beginning with the resignation of Assistant Secretary of Defense Richard Perle in the spring of 1987. Even more damaging was the departure in November 1987 of Secretary of Defense Caspar Weinberger, one of the administration's strongest and most outspoken advocates of SDI. Though reluctant to leave, he reportedly did so in deference to the wishes of his wife, Jane, who had been in poor health for some time. "It is a critical moment for the program," observed Perle. "It's lost its second champion in Weinberger, the first being the president."⁵

(U) To succeed Weinberger as secretary of defense, Reagan named his national security adviser, Frank C. Carlucci. A skilled and practiced veteran of national security affairs, Carlucci had previously served as deputy director of the CIA and as deputy secretary of defense. Shortly after succeeding Weinberger, he was quoted as having told a meeting of the National Security Planning Group that "there is no meaningful distinction between me and Cap" on SDI.⁶ But if basic policy was to remain the same, its tone and conduct were destined to change. Hoping to improve relations with Congress, Carlucci notified Sam Nunn, chairman of the Senate Armed Services Committee, that he thought the time had come for a truce on SDI and that henceforth the Pentagon and the committee should work more closely together. Turning to another aspect of the problem, he called in Lt. Gen. James Abrahamson, the director of SDIO, and told him candidly that from now on he should be "less of a salesman and more of a program manager." "A lot of attention was paid to selling the program,"

⁵ Quoted in Arms Control Reporter, 1987, sec. 575.B., p. 278.

⁶ Quoted in Evans and Novak, Washington Post, Dec. 9, 1987: *op. ed.*

Carlucci recalled, "and a lot of Abrahamson's time was taken up with doing just that. I felt when I came in that the program needed a somewhat lower profile."⁷

(U) Abrahamson's days as SDIO director appear to have been numbered almost from the moment Carlucci arrived at the Pentagon. Despite strong continuing support for Abrahamson from congressional conservatives, his credibility among the vast majority of the members of Congress was increasingly in doubt. One sign of his waning influence was the visibly growing impatience during hearings exhibited by some congressmen and senators who sat on the armed services and appropriations committees; they seemed little interested in what he had to say. But ultimately, it was Abrahamson's zealous promotion of SDI, embarrassing to the Defense Department and potentially detrimental to congressional confidence in SDI, that cost him his job. As the chairman of the Joint Chiefs, Admiral William J. Crowe, Jr., later put it, echoing Carlucci's worry, Abrahamson had become "as much an advocate and a salesman as he was a project director."⁸

(U) Much of this criticism Abrahamson took in stride, as just part of a high-visibility Pentagon job. Typical was his reaction to the publication of the third (and final, as it turned out) staff study, "Star Wars at the Cross Roads," jointly sponsored by Democratic Senators William Proxmire, J. Bennett Johnston, and Dale Bumpers. Like the two previous Senate staff studies, this one was extremely critical of SDI, dismissing it as an "evaporating" concept, a "fading vision," and "built on shifting sands." Abrahamson, in reply, deplored the report's "broad examples of inaccuracies" and "misrepresentation" of data. An indignant Senator Johnston demanded an immediate explanation, suggesting that it was Abrahamson who was doing the misrepresentation. But Abrahamson refused to be cowed. "It is certainly not my intent to deceive anyone," he insisted. "On the other hand, I remain concerned, greatly, about the tone and substance contained in the staff report prepared for your use and released publicly."⁹

⁷ Author's interview with Carlucci, Sept. 9, 1991. Also see Strobe Talbott, The Master of the Game: Paul Nitze and the Nuclear Peace (New York: Knopf, 1988), 363.

⁸ Washington Post, Feb. 18, 1990: A18.

⁹ SDIO Response to Query--Proxmire/Bumpers/Johnston Report, June 10, 1988; ltr, Johnston to Abrahamson, June 17, 1988; and ltr, Abrahamson to Johnston, July 26, 1988, all in SDIO Director's Chron. file.

(U) All the same, the wear and tear of attacks like these were beginning to tell. In addition to the assaults on Abrahamson's credibility, there were now growing complaints on Capitol Hill about his management practices. With Weinberger's encouragement and support, Abrahamson had organized SDIO so as to exercise strong, centralized control of its operations, with the least amount of outside bureaucratic involvement. Shortly before leaving office, Weinberger issued a directive reaffirming SDIO's independence and giving Abrahamson apparent leeway to take whatever steps he deemed necessary to protect his centralized control from congressionally-mandated restrictions.¹⁰ Upon learning of Weinberger's directive, Sam Nunn fired off a letter to Carlucci demanding a clarification, asking whether the purpose was to circumvent congressional legislation and whether this was still administration policy.¹¹ Subsequent exchanges quelled the controversy and left Nunn apparently satisfied that SDIO would conduct its operations fully within the law. But the whole episode seemed to suggest that Abrahamson was running a maverick organization.

(U) Equally injurious to Abrahamson and SDIO was an investigation in the spring of 1988 by the Legislation and National Security Subcommittee of the House Committee on Government Operations, which targeted SDIO's accounting practices. The committee's main complaint was that, "with the furious pace of SDI spending," the SDIO director had failed to adopt appropriate accounting safeguards. Specifically, he had not implemented an internal management control program (IMCP) as required for all defense agencies under the Federal Managers' Financial Integrity Act of 1984. The committee found no evidence of fraud or abuse, but it was concerned that SDIO's allegedly lax administrative practices be replaced as soon as possible by "an adequate internal management control system." The clear impression was that, until then, Abrahamson would be squandering taxpayers' dollars.¹²

(U) As the thrust of this investigation suggested, it was the growing cost of SDI that continued to be in the forefront of congressional interest in the program, especially with the looming

¹⁰ Memo, Weinberger for ASD (P&L), et. al., Nov. 16, 1987, sub: SDI Management Authorities, SDIO External Affairs, Cong. Correspondence file.

¹¹ Ltr, Nunn to Carlucci, Feb. 12, 1988, *ibid*.

¹² H. Rpt. No. 100-728.

prospect that Congress might someday be faced with a decision to go beyond research and to fund deployment as well. Even though congressionally-imposed restrictions on FY 1988 appropriations had forced SDIO to forgo testing under the broad interpretation of the ABM Treaty, thereby delaying a deployment decision by up to two years or more, plans in DoD were going ahead anyway to lay the groundwork for making SDI an operational reality someday. The SDIO budget for FY 1989 that was now before Congress was the first to contain funding specifically earmarked to support research for Phase I deployment. This followed the recommendations the previous summer of the Defense Acquisition Board (DAB) to advance six SDI technologies to the demonstration and validation level in recognition of their potential as components in a Phase I deployment (see Chapter VI). The six technologies included in the DAB's recommendation were the space-based interceptor (SBI), essentially the same program as the controversial space-based kinetic kill vehicle system; the ERIS ground-based interceptor missile; the Boost Surveillance and Tracking System (BSTS), a constellation of satellites to provide timely warning of a Soviet missile launch; the Space Surveillance and Tracking System (SSTS), another satellite constellation that would follow Soviet missiles in their midcourse trajectory; a Long-Wave Infrared Probe System to provide additional tracking data during the late midcourse and early terminal phase; and a Battle Management/Command, Control, and Communications system (BM/C3) to coordinate defenses.¹³ However, Abrahamson insisted that long-term research was still SDIO's first priority, accounting for 50 percent of the organization's proposed budget, compared with 14 percent allocated to Phase I systems. The remaining 36 percent would be divided between the two activities.¹⁴

¹³ Sanford Lakoff and Herbert York, A Shield in Space? Technology, Politics, and the Strategic Defense Initiative (Berkeley: University of California Press, 1989), 116.

¹⁴ Abrahamson testimony, Mar. 31, 1988, SCA, Hearings: DoD Appropriations for FY 1989, Pt. 2, 285, 304.

FIGURE VII-1
FY 1989 SDIO BUDGET REQUEST
AND RESOURCE ALLOCATION
(\$ in millions)

Program Element	FY88 Approp.	FY89 Request for Phase I	FY89 Request for Follow-on	FY89 Phase I and Follow-on
SATKA	\$ 956		\$ 383	742
DEW	832		1030	
KEW	792	\$ 580	356	
SC/BM/C3	503	74	47	519
SLKT	449		422	368
Program Mgt.	20		13	12
TOTALS	\$3552*	\$ 654	\$2251	\$1641

* Does not include approximately \$70 million appropriated for military construction and miscellaneous accounts.

Source: U.S. Congress, House, Committee on Armed Services, Hearings: National Defense Authorization Act for Fiscal Year 1989, Title II, 100:2 (Washington, D.C.: G.P.O., 1989), 1106.

(U) Still, with SDIO actively committed to exploring deployment options, the future of the program was more than ever on the minds of those making decisions on Capitol Hill. With over \$11 billion having been appropriated for it thus far, SDI now ranked as the single most expensive research effort in the Defense Department's history. Refinements in the program, such as those recommended by the DAB, would invariably push costs even higher and not necessarily assure that SDI would yield an effective and affordable system of protection. Indeed, according to a widely publicized two-year study by the congressional Office of Technology Assessment (OTA), much remained to be done to demonstrate the feasibility of the systems (kinetic kill weapons especially) under consideration for Phase I deployment and to determine whether Soviet countermeasures would be more effective and less expensive than U.S. space-based defenses. Worst of all, the OTA study found, serious shortcomings in such critical areas as computer software could cause the entire system to suffer a "catastrophic failure" (i.e., a decline of 90 percent or more in system performance) the first, and presumably only, time it needed to be used.¹⁵

(U) Despite such dire findings, there were no indications that Congress was about to reassess its basic commitment to SDI. However, there were signs, not only from congressional conservatives who wanted some form of deployment to begin as soon as possible, but increasingly from leading moderates like Nunn, that Congress was growing restive, that it wondered whether the money invested in SDI was being spent wisely, and that it would not be averse to reorienting the program toward more concrete, near-term goals.

(U) Nunn had always been somewhat critical of the administration's conception of SDI, and on January 19, 1988, in a speech to the Arms Control Association, he went a step further in distancing himself from the program. He urged the administration to rethink its objectives and to settle for something a good deal less ambitious. "For the near term," he said, "we should seriously explore the development of a limited system for protecting against accidental and unauthorized missile launches." Such a system, Nunn contended, was easily within reach using existing ground-based anti-ballistic missile technology, like ERIS, and could be deployed with little or no

¹⁵ Office of Technology Assessment, SDI Technology, Survivability, and Software (Princeton, N.J.: Princeton University Press, 1988), 3-5 and *passim*.

trouble in compliance with the ABM Treaty. While continuing to support long-term research in advanced defensive technologies, especially in the directed energy field, Nunn said he was skeptical whether reliable and cost-effective space-based defenses--those capable, in other words, of meeting the Nitze criteria--were either technically or politically feasible for years to come. Nunn was convinced that the kinetic kill vehicles, or space-based interceptors, that SDIO was most interested in for Phase I deployment would prove exceedingly costly and would offer only marginal protection. But beyond that, he deemed it highly unlikely that majority opinion in Congress would ever embrace the administration's liberal interpretation of the ABM Treaty, without which further proof testing of these kinetic kill systems would be exceedingly difficult. In sum, Nunn believed that the time had come to place SDI in a broader context of national priorities and national vulnerabilities, and to recognize that strategic defenses were not, as President Reagan was apparently persuaded, the panacea to America's defense problems.¹⁶

(U) Reactions to Nunn's proposal of an accidental launch protection system, or ALPS as it came to be known, followed a varied pattern. Abrahamson, at a press conference on February 29, termed Nunn's idea "a constructive suggestion."¹⁷ But while expressing willingness to look into the matter further, he dismissed the threat of an accidental Soviet launch as "very, very minor."¹⁸ Democratic Sen. J. Bennett Johnston, one of SDI's most persistent doubters, for once agreed with Abrahamson, terming ALPS a response to "an implausible threat."¹⁹ Other skeptics of SDI, such as Spurgeon Keeny, a defense adviser in the Carter administration and now director of the Arms Control Association, saw Nunn's proposal as really a ploy designed to land the United States on the "slippery slope" toward full deployment.²⁰

¹⁶ Sam Nunn, "Arms Control in the Last Year of the Reagan Administration," Speech before the Arms Control Association, Jan. 19, 1988, copy in SDIO External Affairs, Congressional Correspondence file.

¹⁷ Washington Post, Apr. 25, 1988: A5.

¹⁸ U.S. Congress, Senate, Committee on Appropriations, Hearings: Department of Defense Appropriations for Fiscal Year 1989, 100:2 (Washington, D.C.: G.P.O., 1988), Pt. 2, 263.

¹⁹ Congressional Record, May 11, 1988: S 5428.

²⁰ National Review, Mar. 4, 1988: 18.

(U) Of more critical importance to the future of SDI was Nunn's criticism that the administration's Phase I deployment would not meet congressionally-mandated cost effectiveness criteria. Readdressing this issue, Abrahamson now conceded that there was indeed room for doubt since, in the light of more sophisticated cost analyses, the proposed Phase I architecture would run between \$75 and \$150 billion, not the \$40 to \$60 billion he had predicted in 1987.²¹ Part of the appeal of ALPS was that it would cost considerably less--between \$4.5 and \$15 billion, according to industry estimates.²² Encouraged that ALPS would give SDI the foot in the door it needed on affordable terms, three stalwart Republican proponents of SDI--Senators Malcolm Wallop of Wyoming and Gordon Humphrey of New Hampshire, and Rep. Jack Kemp of New York--wrote President Reagan in early February urging him to endorse ALPS legislation immediately. "We believe," they wrote,

that the moment is ripe for you to proceed with a historic decision: To initiate the development and deployment of this critical first layer of SDI defense [sic] during your Administration. Neither existing treaties, nor technological or political limitations would be a barrier to such a decision.²³

Subsequently, as part of his campaign for the Republican presidential nomination, Kemp unveiled his own ALPS scheme, which he also planned to introduce as an amendment to the FY 1989 defense authorization bill.²⁴

(U) Despite the groundswell of support for ALPS among conservatives and moderates in Congress, its proponents within the administration were few. General Robert T. Herres, USAF,

²¹ Abrahamson testimony, Apr. 18, 1988, SCAS, Hearings: DoD Authorization for FY 1989, Pt. 6, 693, 698.

²² See Anne H. Cahn, Martha C. Little, and Stephen Daggett, "Nunn and Contractors Sell ALPS," Bulletin of the Atomic Scientists 44 (June 1988): 10-12.

²³ Ltr, Wallop, Humphrey, and Kemp to Reagan, Feb. 5, 1988, SDIO External Affairs, Congressional Correspondence file.

²⁴ "Rep. Jack Kemp Proposes Amendment for ALPS," News Release, May 11, 1988, copy in SDIO External Affairs, Congressional Correspondence file.

Vice Chairman of the Joint Chiefs of Staff, saw no military advantage to be gained from such a program. Defending against errant Soviet missiles, he told the press, "is not a military requirement."²⁵ Secretary Carlucci, for his part, dismissed the threat posed by an accidental Soviet launch as not "something we need be overly concerned with." One of his main objections to ALPS, he added, was "a danger of some diversion of resources."²⁶ But even though he was unenthusiastic about ALPS, Carlucci could sense that, come what may of the proposal, Nunn had used it effectively to expose SDI's vulnerabilities. Indeed, Carlucci realized that outside pressures were building for changes in SDI, and that certain aspects of the Phase I deployment--most notably the planned use of space-based interceptors---made many members of Congress, including staunch supporters of SDI, uneasy.²⁷ Not only would the testing of SBIs be questionable under almost any interpretation of the ABM Treaty, but also, according to critics, SBIs would be extremely vulnerable to Soviet countermeasures like anti-satellite weapons and not be able to cope with upgrades in the Soviet ICBM force, such as the addition of fast-burning boosters.²⁸

(U) Even before ALPS became an issue, Carlucci, like Nunn, had come to doubt whether SDIO's planned Phase I deployment was a realistic objective. Based on his experience with the procurement process, Carlucci judged that it would be well after the turn of the century before deployment of effective defensive technologies could begin. "I'd watched any number of programs slip," he recollected, "and this one was grossly optimistic."²⁹ Accordingly, in early 1988 he asked Robert R. Everett, a senior executive with the MITRE Corporation and chairman of the Defense Science Board (DSB), a blue ribbon Pentagon advisory panel, to head a nine-member DSB task force

²⁵ Washington Post, Apr. 25, 1988: A7.

²⁶ Carlucci testimony, Feb. 25, 1988, U.S. Congress, House, Committee on Appropriations, Hearings: Department of Defense Appropriations for 1989, 100:2 (Washington, D.C.: G.P.O., 1988), Pt. 1, 108.

²⁷ See ltr, Sen. Howell Heflin to Carlucci, Dec. 10, 1987, SDIO External Affairs, Congressional Correspondence file; and ltr, Sen. Richard Shelby to Carlucci, Dec. 9, 1987, SDIO Director's Chron. file.

²⁸ See Raold Rosenberg, "The many phases of SDI," The Bulletin of the Atomic Scientists 44 (May 1988): 3-4.

²⁹ Author's interview with Carlucci, Sept. 9, 1991.

to conduct a technical reassessment of the program. "He wanted a fresh review and he wanted us to tell him what we thought about how the program was going and how it might be structured," Everett recalled of Carlucci's instructions. "He did not ask us to take into account how much money should be spent or whether it should be done."³⁰

(U) The Everett group's report, submitted to the Secretary of Defense in April, recommended caution in proceeding with the Defense Acquisition Board's validation scheme. From a developmental standpoint, the panel recommended that priority be given to sensors for the detection of attacking missiles, tracking them, and processing the information associated with these function. But instead of space-based interceptors, the panel favored, as a near-term alternative, many of the same actions encompassed in Nunn's ALPS proposal. These included, initially, a "limited, treaty compliant, deployment of 100 fixed ground-based long range interceptors," followed by a treaty compliant deployment of space surveillance systems and other add-ons. "This approach," the panel argued, "would allow for more confident decisions and more flexibility in the face of uncertainties and would probably not require any more time in the long run."³¹

(U) As word of the DSB inquiry leaked to the press, it set off a flurry of rumors and press reports that SDI was about to undergo a major restructuring. Categorical denials from both Abrahamson and Carlucci that this was not the case failed to stem the speculation. "SDI's ultimate goal has not changed," Carlucci insisted. "The path toward the president's vision is a staircase. Advance will come a step at a time, and Phase I is the first step."³²

(U) But while the ultimate goal remained the same, the means of getting there were beginning to show signs of change. Acting on the Everett panel's recommendations, Under Secretary of Defense for Acquisition Robert B. Costello, advised Abrahamson in late May that SDIO should

³⁰ Everett testimony, July 14, 1988, U.S. Congress, House, Committee on Armed Services, Hearings by the Special Panel on the Strategic Defense Initiative, 100:2 (Washington, D.C.: G.P.O., 1989), 267.

³¹ (U) Defense Science Board, "Report of the Strategic Milestone Panel," Apr. 13, 1988, copy in SDIO Historian's files.

³² Frank C. Carlucci, "SDI Isn't Falling Short of Reagan's Vision," Wall Street Journal, Apr. 12, 1988. For Abrahamson's views, see SCA, Hearings: DoD Appropriations for FY 1989, Pt. 2, 247.

begin planning for more modest objectives, a move seen as preparatory to bringing the program under closer control by the Pentagon's civilian managers.³³ Less than a week later, on June 2, the Defense Acquisition Board, at Carlucci's request, decided to review its 1987 recommendations. As a possible alternative, the board asked SDIO to provide detailed plans, including cost and effectiveness studies, for the deployment of 100 ground-based missile interceptors and associated sensors, either at the old ABM site of Grand Forks, North Dakota, or around Washington, D.C.³⁴ Reagan, when apprised of these developments, was said to be "uncomfortable" with the idea of a limited deployment, especially if it protected only Washington. But he apparently raised no objections when Carlucci raised the matter at a White House meeting on June 14. The next day Carlucci discussed his proposal further over breakfast with Secretary of State Shultz, who was reported to be in accord.³⁵

(U) Although the resulting restructuring of SDI would not be as radical and extensive as some observers at the time predicted, it would definitely alter the program's future. Of more immediate concern from Carlucci's standpoint was to restore congressional confidence in the program, not only to increase its near-term prospects for funding, but also to provide it with a firm base for long-term support. These decisions came too late to influence congressional debate on SDIO's FY 1989 budget, but they did point to a more realistic outlook on the part of the administration, which would help facilitate final action on one of the most controversial defense spending bills of Reagan's presidency.

³³ Colin Norman, "SDI Deployment Plan Up in the Air," Science 241 (June 17, 1988): 1608-1609.

³⁴ Washington Post, June 18, 1988: A9.

³⁵ *Ibid.*

SDI and Arms Control

(U) In addition to the SDI program itself, Congress and the administration continued to spar during 1988 over SDI's impact on arms control and relations with the Soviet Union. This included not only another round of debate on the controversial broad versus narrow interpretation of the ABM Treaty, but also the impact of the recently signed INF Treaty, limiting U.S. and Soviet intermediate and short-range nuclear weapons, and what to do about the Soviet Union's obvious violation of the ABM Treaty at its Krasnoyarsk radar site in Central Asia. As in previous such debates, the outcomes were far from definitive or totally satisfying to all involved. But the more Congress and the administration worked on resolving these issues, the closer they came to a consensus.

(U) At the center of congressional interest in arms control at the outset of 1988 was the INF Treaty signed by President Reagan and Soviet Party Secretary Gorbachev at their Washington summit meeting in December 1987. The immediate significance of the INF Treaty was two-fold. First and foremost, it incorporated the ambitious American zero option proposal, which required both the United States and the Soviet Union to phase out all of their ground-based nuclear missiles with ranges between 300 and 3,400 miles. For the Soviets, who had initially resisted the zero option, the agreement had the advantage of eliminating any threat posed by U.S. Pershing II and ground-launched cruise missiles (GLCMs) based in NATO Europe; for the United States, it gave President Reagan the opportunity to claim "the complete elimination of an entire class of U.S. and Soviet nuclear missiles."³⁶ After years of enduring Democratic criticism for dawdling on arms control, Reagan could now contemplate leaving office knowing that his legacy would include one of the most far-reaching arms reduction measures ever negotiated.³⁷

(U) Second, the signing of the INF Treaty generated speculation, both in the press and on Capitol Hill, that the log-jam on a START (i.e., strategic arms) deal would also soon be broken, and

³⁶ "Remarks on Signing the INF Treaty," Dec. 8, 1987, Public Papers of the Presidents of the United States: Ronald Reagan, 1987 (Washington, D.C.: G.P.O., 1989), 1455.

³⁷ Ronald Reagan, An American Life (New York: Simon and Schuster, 1990), 699-700.

that the resulting agreement would invariably involve some constraints on SDI. While the Soviets had failed at the 1986 Reykjavik summit to draw the United States into accepting the concept of linkage between limitations on strategic offensive weapons and SDI, the idea remained very much alive in diplomatic circles and among members of Congress who favored using SDI as a "bargaining chip." Reagan continued to deny that SDI was up for negotiation. He and supporters of the program saw it not as the carrot but as the stick that had brought the Soviets back to the Geneva arms talks. But many in Congress--Republicans as well as Democrats--remained skeptical that concessions on SDI could be avoided if a START agreement were ever to materialize.

(U) One by-product of the INF Treaty was that it gave Nunn and other congressional critics a fresh vehicle for pursuing their attack on the administration's broad interpretation of the ABM Treaty. The immediate issue Nunn raised was the validity of administration testimony during Senate hearings on the INF Treaty, which lasted from January into March 1988, and whether the interpretation being offered by administration witnesses at this time would apply throughout the treaty's life. In particular, Nunn wanted to know whether the elimination of the current generation of intermediate range nuclear weapons, as the treaty called for, would also restrain the introduction of a future generation of such weapons, based on possibly new "exotic" technologies.³⁸ Nunn knew that, by pressing this question, he was exploiting the administration's eagerness for ratification in an effort to exact concessions that would establish once and for all, he hoped, the Senate's prerogatives affecting interpretation of treaties, including not only the recently agreed INF accord but the ABM Treaty and others as well. He later acknowledged to journalist Strobe Talbott that these issues would probably have never occurred to him had it not been for the Reagan administration's decision to offer a new reading of the ABM Treaty.³⁹

(U) As a concession to Nunn's viewpoint, Secretary of State Shultz offered a letter containing, as Nunn put it, "important assurances" as to the validity of administration testimony on the INF Treaty. "We can assure you," Shultz said, "that the Reagan Administration will in no way

³⁸ See U.S. Senate, Committee on Armed Services, Hearings: NATO Defense and the INF Treaty, 100:2 (Washington, D.C.: G.P.O.: 1988).

³⁹ Talbott, Master of the Game, 374.

depart from the I.N.F. treaty as we are presenting it to the Senate."⁴⁰ However, Shultz made no mention of the ABM Treaty, nor did he address the issue of the reinterpretation of treaties by future administrations. Sen. Joseph R. Biden, Jr., a member of the Foreign Relations Committee, found Shultz's "important assurances" inadequate and offered several amendments, or "reservations," to the INF Treaty that would have sharply circumscribed the President's treaty-interpreting authority for this and all other treaties to which the United States was a party, unless he had the Senate's explicit consent.⁴¹ But Senators Robert C. Byrd, the Senate Majority Leader, Claiborne Pell, chairman of the Foreign Relations Committee, and Alan Cranston, the Majority Whip, favored a "stand-alone" treaty that would be judged solely on its merits, and not be used as a means toward other ends, such as restraining SDI. Ultimately, working closely with their Republican counterparts, the Democratic leadership prevailed. When the Senate finally voted, on May 27, 1988, it approved the INF treaty by an overwhelming margin (93-5), adding only a much narrowed reservation stating that no president could later repudiate, without Senate approval, the treaty interpretation presented by administration spokesmen during the ratification process. Reagan said he doubted the constitutionality of this reservation, but with Senate approval of the INF Treaty in hand (Reagan was then in Moscow awaiting Senate action in order to proceed with a treaty-ratification ceremony with Gorbachev) and crippling provisions to the validity of the broad interpretation of the ABM Treaty avoided, he was not about to complain too loudly.⁴²

(U) Nor was Reagan as vocal as he had been on earlier occasions in defending his administration's broad interpretation of the ABM Treaty. Contributing to his reticence, of course, were the constraints under which the administration was compelled to operate due to last year's budget compromise that obliged SDIO to continue testing through FY 1988 under the traditional interpretation of the treaty. This, in turn, dampened the prospects of a more ambitious testing program that might confirm the feasibility of early deployment, and left SDI enthusiasts more

⁴⁰ New York Times, Feb. 10, 1988: A12.

⁴¹ Congressional Quarterly Weekly Report, Feb. 13, 1988: 308.

⁴² *Ibid.*, May 28, 1988:1431-1432.

frustrated and disappointed than ever. As former Assistant Secretary of Defense Richard Perle put it: "The narrow interpretation of the ABM Treaty is death to SDI, and there is no sense pretending otherwise."⁴³ Even former Secretary of Defense Harold Brown, a skeptic of SDI and one of the negotiators of the ABM Treaty, was sympathetic to the idea of finding some way of conducting a broader range of testing, preferably through amendment of the treaty. "I think one way or another," he told the Senate Armed Services Committee, "we are going to be forced to update . . . the ABM Treaty . . . either now or next year or the year after."⁴⁴

(U) Another solution that was gaining favor among SDI proponents was simply to declare the ABM Treaty null and void owing to increased evidence of Soviet violations. The most often cited and serious infraction was the Soviet phased-array radar complex under construction at Krasnoyarsk, in Central Asia, an apparent violation of Article VI of the treaty, which prohibited either party from deploying such radars "except at locations along the periphery of its national territory and oriented outward." Despite Moscow's insistence that the purpose of the Krasnoyarsk radar station was to track Soviet space satellites, many within the U.S. intelligence community suspected that it was part of a planned nation-wide ABM system. U.S. Air Force intelligence went even further, suggesting that the Soviets were on the verge of "breaking out" of the ABM Treaty.⁴⁵ Secretary of State Shultz concurred that Krasnoyarsk was indeed "a clear violation" of the ABM Treaty. And, he added: "We will not agree to any further obligations regarding that treaty until that violation is dealt with satisfactorily."⁴⁶

(U) What Shultz meant by this threat was unclear. Was the President actually contemplating termination of the ABM Treaty? Or was Shultz simply raising the Krasnoyarsk issue for bargaining purposes? Whatever his intention, such declarations certainly encouraged conservative Republicans,

⁴³ Perle testimony, Feb. 4, 1988, U.S. Congress, Senate, Committee on Armed Services, Hearings: NATO and the INF Treaty, 100:2 (Washington, D.C.: G.P.O., 1988), Pt. 3, 149.

⁴⁴ Brown testimony, Jan. 29, 1988, *ibid.*, Pt. 2, 50.

⁴⁵ Arms Control Reporter, 1988: sec. 603.B., pp. 153-154.

⁴⁶ Shultz testimony, Jan. 25, 1988, U.S. Congress, Senate, Committee on Foreign Relations, Hearings: The INF Treaty, 100:2 (Washington, D.C.: G.P.O., 1988), Pt. 1, 27.

led in this instance by an outspoken Jack Kemp, to press for U.S. withdrawal from the ABM Treaty. Not only was Kemp convinced that the ABM Treaty was "an impediment to the accelerated deployment of SDI," but also that it undermined U.S. security through "the bankrupt moral premise that nations have an obligation not to defend their people and territory against attack." That the Soviets, in Kemp's opinion, had repeatedly violated the ABM Treaty only served to reconfirm this "fatally dangerous delusion." "The ABM Treaty has been treated as the crown jewel of arms control," Kemp allowed, "its luster continues to blind otherwise sensible people to its tragic flaws."⁴⁷ Emphasis in original.

(U) But among the Democrats who controlled Congress, there was scant sympathy or support for Kemp's position. Rather, their thinking verged in the opposite direction--toward mandating continued compliance with the narrow interpretation of the ABM Treaty and, at the same time, adding even tougher restraints under which SDIO could conduct tests and experiments. The result, as Congress took up debate of the FY 1989 defense authorization bill, was again a partisan test of will between the Democratically-controlled Congress and the Republican-controlled White House. And with a national election scheduled for the autumn, the confrontation was to prove all the more politically charged.

The Debate in the House

(U) Despite the budget summit agreement of November 1987, under which SDIO was supposedly assured additional funding in FY 1989 of \$4.5 billion, all signs indicated that neither the House nor the Senate would live up to its part of the bargain. As in the past, the most strenuous opposition to SDI was in the House, where the majority continued to harbor deep-seated doubts about the technological feasibility of space-based defenses, their impact on arms control and the ABM Treaty, and, ultimately, their cost. Out of the House's ensuing deliberations would emerge a

⁴⁷ Jack Kemp, "Why the US Must Withdraw from the ABM Treaty...", Remarks prepared for delivery at a conference of the National Institute of Public Policy, Washington, D.C., Oct. 12, 1988, copy in SDIO External Affairs, Cong. correspondence file.

cautious re-endorsement of SDI, containing more restrictions and qualifications than ever, an indication that while the House still backed the program, it wanted to impose tighter reins. Even among the President's most loyal back-bench Republicans, more and more were coming around to the Democrats' view that SDI should be curtailed.

(U) Once again, attention focused initially on the authorization bill, which the Armed Services Committee reported to the House on April 5, 1988. A main concern, as always, was SDI's funding, set at \$3.701 billion, the same figure approved and recommended by the Research and Development Subcommittee. This equaled the FY 1988 appropriation, with a 4 percent increase to offset inflation--all in all, a clear signal that the majority on the committee preferred to hold the line on monetary support until the next administration.⁴⁸ But this was also a sum well below what the administration had expected or deemed fair, and aroused bitter resentment among some Republicans, including Jon Kyl of Arizona, Duncan Hunter of California, and John R. Kasich of Ohio, all of whom offered unsuccessful amendments at mark-up time to boost the authorization.⁴⁹ On the other side, Democratic opponents of SDI, citing the promise of lobbying support from such anti-SDI groups as the Federation of American Scientists and the Union of Concerned Scientists, vowed to seek further reductions on the House floor.⁵⁰

(U) The most controversial item on the committee's agenda was a subcommittee recommendation to slow development of the space-based interceptor, or SBI, program by paring the administration's request for the SBI program from \$330 million to \$215 million. Those who favored the cut openly acknowledged that it was one way they hoped to delay Phase I deployment, since current architecture relied heavily on SBIs. But by a vote of 29 to 20 the committee opted to restore full funding for SBI research.⁵¹ A similar funding reduction, sponsored in 1987 by Rep. Frank McCloskey (D., Ind.), had also failed.

⁴⁸ H. Rpt. No. 100-563: 185.

⁴⁹ "House Armed Services OKs Fiscal '89 Defense Package," Congressional Quarterly Weekly Report, Apr. 2, 1988: 872-873.

⁵⁰ "House Bill Portends Battles Over MX, SDI," *ibid.*, Apr. 9, 1988: 947.

⁵¹ *Ibid.*, Apr. 2, 1988: 873.

(U) One issue the committee's report did not address--but which was on the minds of many House members--was the administration's continued compliance with the narrow interpretation of the ABM Treaty. This was not the highly charged issue it had been the year previously, mainly because, as administration witnesses had assured Congress repeatedly during recent budget hearings, SDIO had no plans during the upcoming fiscal year to conduct tests or to procure equipment for future experiments that might breach the narrow interpretation.⁵² Nonetheless, outside analysts frequently accused SDIO of pressing that interpretation to its limits and of exploiting loopholes in the treaty to conduct experiments.⁵³ As a result, according to one senior researcher for the Arms Control Association, "problems and ambiguities" had already arisen and would continue to arise in the future. The most questionable test to date was the Delta 181 experiment of February 8, 1988, which involved various types of sensors to detect and track simulated enemy targets in space. Though rated an overall technical success in picking out decoys from warheads, critics suggested that the experiment came perilously close to testing in "an ABM mode," thus constituting an infraction of congressionally-imposed restraints and possibly of the ABM Treaty as well.⁵⁴

(U) Seeking clarification of the administration's position, both Les Aspin, chairman of the House Armed Services Committee, and Dante B. Fascell, chairman of the House Foreign Affairs Committee, appealed to the Defense Department for more specific information on the planned scope of SDIO's testing program.⁵⁵ In addition to a briefing on upcoming tests for the members and staff

⁵² See especially the testimony by Robert B. Costello, Under Secretary of Defense for Acquisition, Apr. 18, 1988, SCAS, Hearings: DoD Authorization for FY 1989, Pt. 6, 679-701. Also see Carlucci testimony, Feb. 18, 1988, U.S. Congress, Senate, Committee on Armed Services, Hearings: Department of Defense Authorization for Appropriations for Fiscal Year 1989, 100:2 (Washington, D.C.: G.P.O., 1988), Pt. 1, 79-80; and Abrahamson testimony, Mar. 16, 1988, HCAS, Hearings: DoD Authorization FY 1989, RDT&E, 1138.

⁵³ See for example Vincent Kiernan, "Star Wars vs. the ABM Treaty," Technology Review 93 (Feb. 1990): 17-19; and Ashton B. Carter, "Testing Weapons in Space," Scientific American 261 (July 1989): 33-40.

⁵⁴ Matthew Bunn, "Star Wars Testing and the ABM Treaty," Arms Control Today (Apr. 1988): 11-18; New York Times, Feb. 10, 1988: A18.

⁵⁵ Ltr, Fascell to Abrahamson, Feb. 16, 1988; ltr, Fascell to Abrahamson, Mar. 24, 1988; and ltr, Aspin to Carlucci, Apr. 11, 1988, all in SDIO External Affairs, Congressional Correspondence file.

of the Foreign Affairs Committee, Abrahamson arranged a meeting between Carlucci and Aspin on April 12, at which Aspin seemed satisfied after reviewing two pages of "talking points" reaffirming SDIO's adherence to the narrow interpretation.⁵⁶ Hoping to avoid legislation such as Congress had imposed the year before, Carlucci subsequently offered a further written guarantee. "As a matter of fact," he told Aspin, "the SDI program as part of the President's Budget includes no experiment or test in FY 1989 that would go beyond the so-called restrictive interpretation of the ABM Treaty. Nor does our program include funds to purchase equipment in FY 1989 that would be uniquely required for such experiments or tests."⁵⁷ But despite these assurances, Aspin on April 27 still offered an amendment, carefully worded in deference to administration preferences so as to make no specific mention of the ABM Treaty, mandating continued compliance with the narrow interpretation.⁵⁸ Following a brief debate, Aspin's amendment passed easily, 252 to 159, with 28 Republicans voting in the majority.⁵⁹

(U) This was only the first of several setbacks SDI experienced as the House worked its way through the FY 1989 defense authorization bill. Next, on May 4, 1988, came the showdown over the budget, virtually a carbon copy of the previous year's debate. Once again, citing the higher level of funding that seemed likely to pass in the Senate (see below), Aspin withdrew his endorsement of the Armed Services Committee's mark of \$3.7 billion and threw his support behind an amendment offered by Rep. Charles E. Bennett (D., Fla.) to trim the authorization to just under \$3.2 billion--a 10 percent net reduction, which Carlucci and National Security Advisor Colin L. Powell both warned the President might veto. Also on the table were two other spending amendments: one sponsored by Republican Representative Kyl of Arizona to increase the authorization to the administration's request of \$4.5 billion; and yet another of the now familiar "kamikazi" amendments jointly sponsored by Representatives Ronald Dellums (D., Calif.) and Barbara Boxer (D., Calif.). This time they

⁵⁶ "Talking Points in Response to Congressman Aspin's Letter on the SDI Report to Congress," Apr. 11, 1988, *ibid.*

⁵⁷ Ltr, Carlucci to Aspin, Apr. 27, 1988, *ibid.*

⁵⁸ Congressional Record, Apr. 27, 1988: H 2582.

⁵⁹ Congressional Quarterly Almanac, 1988, p. 28-H.

wanted to terminate SDIO, create in its place a Strategic Technology Research Office, and cap strategic defense research at \$1.265 billion. Speaking in support of both the Bennett and Dellums-Boxer amendments, Rep. Les AuCoin (D., Ore.) noted that, if either passed, he would move to have the savings transferred to the Coast Guard in order to step up patrols against illegal drug smuggling. "The choice is yours," AuCoin insisted, "star wars or drug wars."⁶⁰ Many Republicans were said to be infuriated.⁶¹

(U) As it happened, both the Kyl and Dellums-Boxer amendments went down to easy defeat, a sign that most House members still preferred the middle ground. But in a vote mainly along party lines, the House also rejected the committee's recommendation of \$3.7 billion, and proceeded to adopt the Bennett amendment, 223 to 195, to hold SDI funding to under \$3.2 billion. While 47 Democrats broke ranks to vote against the Bennett amendment, 26 Republicans voted for it. Although proponents of the Bennett amendment cited various reasons for their support, including their preference for arms control and their opposition to higher defense spending, the rationale stressed by Bennett himself was that, with less money available, SDIO would have to rethink its plans for deployment, particularly its reliance on space-based interceptors, to which Bennett strongly objected. "We must not race ahead with SDI's half-baked proposals to deploy, as planned, 300 satellites in space," Bennett argued. "If we deploy SDI the world will almost inevitably be a much more dangerous place, not a safer one."⁶²

(U) After disposing of the funding question, the House then turned its attention to an amendment offered by Rep. John M. Spratt, Jr. (D., S.C.), usually a moderate on defense matters, to limit spending on Phase I technologies to 40 percent of SDIO's FY 1989 budget and no more than 50 percent in FY 1990. As chairman of a special House Armed Services Subcommittee on SDI, Spratt presided over an ongoing inquiry into the technical aspects of the program and their potential contributions to strategic defense. The actual purpose of his amendment was to thwart even further

⁶⁰ Congressional Record, May 4, 1988: H 2910-2930.

⁶¹ Congressional Quarterly Weekly Report, May 7, 1988: 1208.

⁶² Congressional Record, May 4, 1988: H 2910.

the development and testing of space-based interceptors which Spratt, like Bennett and a growing number of others in the House, opposed, partly because of ABM Treaty implications, but also because, as the recent OTA report and other critics had suggested, the questionable effectiveness of SBIs and their potential vulnerability to countermeasures could lead to strategic instability. Based on what the subcommittee had found so far, Spratt believed that SDIO was giving unwarranted support the SBI program and to technologies with near-term application at the expense of more promising future defenses involving laser weapons and particle beams. "In the long term," Spratt argued, "the efficacy of strategic defense is going to turn on the efficacy of directed-energy weapons." Rep. Jim Courter, an perennial advocate of SDI, applauded Spratt's intentions, but disagreed that all supporters of the amendment thought likewise. "There are others," Courter said, "who like to say they are in favor of strategic defense, but they . . . restrict the research dollars to make sure that, in perpetuity, it remains a concept." Nonetheless, the Spratt amendment passed, 244 to 174, with the endorsement of 27 Republicans.⁶³

(U) Finally, on May 11, the House concluded its debate of the authorization bill by choosing between two similar, but competing, ALPS amendments. The first, offered by Rep. Spratt, called for SDIO to prepare a study and report to Congress on the merits and feasibility of an ABM Treaty-compliant ALPS system that relied on a single, ground-based deployment rather than space-based interceptors. Its competition was an amendment sponsored by Rep. Jack Kemp who would go further and require a study of an ALPS system deployed at two locations (Grand Forks, North Dakota, site of the original U.S. ABM facility, and Washington, D.C.), along with associated space-based sensors. Spratt noted that SDIO favored neither of these amendments, because it considered them a diversion of resources from the main objective--a space-based architecture affording nation-wide protection. But as with his opposition to SBIs, Spratt urged caution before investing heavily in any unproven space-based technologies, even though a ground-based system might offer less coverage. "It won't protect enough of the United States," Spratt conceded, "but neither will [Kemp's] system." With sentiment in the House running against proposals to boost SDI,

⁶³ *Ibid.*, H 2935-2937.

Spratt's amendment carried easily, 239 to 176, while Kemp's fell short by an almost identical margin, 167 to 249.⁶⁴

(U) By the time the House finished with the defense authorization bill, it was clear that support for SDI in the lower chamber was slipping. Not only were Democrats fairly solid in voting to curb the program's growth, but also an increasing number of Republicans were deserting it as well. Especially notable was the House's opposition to space-based interceptors, a key element in SDIO's Phase I architecture. Though SDI had survived, it certainly had not prospered. With the restrictions on funding and testing the House wanted, the program would be more constrained than ever. Nor, as it happened, would the Senate offer much relief.

Senate Deliberations and Reagan's Veto

(U) Like the House, the Senate moved quickly to clear the FY 1989 defense authorization bill in an effort to put as much business as possible behind it before the summer party nominating conventions and fall campaign. The year before Vice President George Bush had had to cast the tie-breaking vote to defeat an amendment by Sen. J. Bennett Johnston that would have significantly reduced SDI's funding. This year, although Senate opponents of the program mounted fresh attacks, support for their position was less forthcoming, a sign that election-year posturing took precedence. Additionally, improved relations between Nunn and the Defense Department meant a more business-as-usual atmosphere, from which SDI benefited. But the overall impression left by the debate was that, while the Senate may have been more outwardly supportive of SDI than the House, its members were also having second thoughts. And ultimately, given the conference bill that emerged, Reagan would take sharp exception and cast a veto that would leave the entire defense budget dangling.

⁶⁴ *Ibid.*, H 3135-3140.

(U) Having been a key participant in the previous year's budget summit, Nunn was especially keen on upholding his share of the agreement. Accordingly, on May 4, 1988, the Senate Armed Services Committee reported an authorization bill recommending nearly \$4.3 billion for SDI, somewhat less than the President's amended budget request, but still an increase of approximately 20 percent over the FY 1988 appropriation. Included in the bill was a proviso, similar to the one recently adopted in the House, requiring the administration's continued compliance with the narrow interpretation of the ABM Treaty. In effect, the committee wanted to extend for another year the prohibition that had appeared in the FY 1988 authorization law on development and testing of space-based or other mobile ABM systems, including the prohibition on acquisition of equipment for such development and testing. The committee did not entirely rule out planning by SDIO for future development and testing that might go beyond the narrow interpretation, but it offered little encouragement, given the attitude of the committee's majority, that it would look favorably on changes resulting in a less restrictive development and testing policy.⁶⁵

(U) Even though the White House and the Defense Department strongly objected to these limitations, majority opinion in the Senate, as on the committee, continued to support R&D under the narrow interpretation. Consequently, while some Republicans did oppose the restrictions and later cited them as justifiable grounds for the President's veto of the bill, there were no attempts on the Senate floor to have them deleted. Instead, the most intense debate was, as usual, over funding, which several Democratic senators, all inveterate critics of the program, sought to curb. However, the only measure that came close to passing was an amendment offered on May 11 by Johnston of Louisiana to transfer \$700 million from SDIO to NASA to offset the cost of military use of the space shuttle. Johnston denied that he was "talking about gutting" SDI, but the senator's long history of opposition to strategic defenses caused Republican Quayle of Indiana to dismiss the amendment as merely "a sleight of hand" way of paring the program to its FY 1988 level. Most agreed with Quayle, but it took three votes, owing to parliamentary procedures, before the Senate finally killed the measure, 50 to 48. A companion proposal simply to reduce SDIO's budget by \$700 million

⁶⁵ S. Rpt. No. 100-326: 60-62.

(technically known as a "second degree amendment"), sponsored by Democratic Senator William Proxmire of Wisconsin, likewise failed, but by a significantly larger margin, 66 to 29.⁶⁶ Two days later Senator Carl Levin of Michigan tried to cut SDIO by \$600 million and have the savings transferred to Army and Navy accounts to strengthen conventional capabilities. His measure also went down to defeat, 51 to 43, with 13 Democrats voting against it.⁶⁷

(U) Yet if Senate opponents of SDI seemed to have little success, neither did supporters. On May 13, 1988, Senator Malcolm Wallop of Wyoming offered an amendment, carrying a step further the recommendation he and several other conservative Republicans had urged earlier on President Reagan, to earmark \$100 million for the rapid development and deployment of an ABM Treaty-compliant ALPS system, consisting of 100 ground-based interceptors, at the old ABM site at Grand Forks, North Dakota. Wallop acknowledged that, while he supported SDI, he was also one of the administration's most dogged critics. In particular, he was troubled by the slow pace of progress and by what he termed a concept of development within the Reagan administration that "would only produce more research contracts," not actual weapons systems. Wallop knew that the administration was lukewarm toward ALPS, but he argued nonetheless that deployment of such a system, even within the limited bounds of the ABM Treaty, would have immense symbolic value--"a commitment to action from the administration and most especially from the Congress."⁶⁸

(U) Wallop hoped that Nunn, who had originally floated the ALPS idea, would co-sponsor the amendment.⁶⁹ But as the debate unfolded, Nunn steadily distanced himself from ALPS, even denying that he had ever proposed such a system in the first place. His intention in his January speech, he now said, had been to highlight the idea of accidental launch protection for further study as a possible alternative to the administration's Phase I deployment of SDI, but not to endorse it. Though gratified that ALPS had received so much attention, Nunn insisted that he was neither for

⁶⁶ Congressional Record, May 11, 1988: S 5425-5441.

⁶⁷ *Ibid.*, May 13, 1988: S 5728.

⁶⁸ *Ibid.*, May 13, 1988: 5699-5700.

⁶⁹ See ltr, Wallop to Nunn, Jan. 26, 1988, in *ibid.*, May 13, 1988: S 5701.

nor against the idea; on the contrary, he remained uncommitted, maybe even somewhat more skeptical now than earlier that ALPS was feasible.⁷⁰ For Wallop's amendment, whose prospects were never very good to begin with, Nunn's disavowals were most certainly fatal. It lost, 37 to 56.⁷¹

(U) Developments over the next few weeks would turn the FY 1989 defense budget, the last to be passed during Reagan's presidency, into the most controversial of his eight years in office as well. After further deliberations the House-Senate conference committee on July 7, 1988, reported an authorization bill which, to Reagan's and his supporters' dismay, undercut a number of the administration's key defense programs. For SDI the committee split the difference on funding, settling on a figure of \$3.738 billion, nearly a 20 percent reduction from SDIO's amended request and less than enough, allowing for inflation, to stay even with the FY 1988 appropriation. Leaning more toward the House's version of the bill than the Senate's, the committee crafted a compromise that both encouraged more research on advanced, exotic technologies with long-term potential, such as the free electron laser and the neutral particle beam, and at the same time effectively mandated a go-slow approach toward the administration's impending Phase I deployment. Contending that a more viable near-term option should be found, the conference sided with the House that an ABM Treaty-compliant ALPS system, built around such ground-based kinetic-kill interceptors as ERIS and HEDI, seemed a more viable and attractive possibility. The committee also retained nearly all of the restrictions voted in both chambers on development and testing and refined several others. In sharp contrast to past procedure, it now adopted the House's practice of imposing "fences," which set funding minimums for ground-base kinetic interceptors and free electron laser technology at \$350 million and \$250 million respectively; and a ceiling of \$85 million on the space-based interceptor, as opposed to the \$300 million that SDIO had originally earmarked for this program in its budget submission. The committee said that it was encouraged by the administration's decision to undertake a reassessment of SDI, but that it still found cause for concern "about the direction and

⁷⁰ *Ibid.*, May 11, 1988: S 5428; and May 13, 1988: 5709.

⁷¹ *Ibid.*, May 13, 1988: S 5718.

priorities" of the program, especially SDIO's proposed reliance on SBIs, which the conferees agreed "should not be considered for early deployment" under the Phase I architecture scheme.⁷²

(U) All in all, if not a major setback for SDI, the conference-approved authorization bill was clearly a serious blow to the administration's hopes and plans for the program. On July 14, 1988, amid press speculation that Reagan was contemplating a veto, Republican critics of the bill, led by Dan Quayle, attempted in the Senate to have the entire defense authorization recommitted to committee, with instructions to the Senate conferees that they insist upon increased funding for SDI and amend other sections of the bill as well. But their efforts fell short, 35 to 58, with not even all Republicans backing the measure.⁷³ Among those opposed was John Warner, ranking minority member of the Senate Armed Services Committee, who likened the protest by Quayle and his allies to "driving a train into a darkened tunnel with no light at the end."⁷⁴ A similar effort to recommit in the House never fully materialized, but the party-line vote to adopt the conference report, 229 to 183, suggested that if Reagan chose to veto the bill, he would be upheld. Even so, Democratic leaders warned that if Reagan opted for a veto, they would include the same SDI funding cuts and other offending features in the final appropriations bill, thereby prolonging the controversy into the fall presidential election campaign.⁷⁵

(U) With another showdown in the making, Reagan found himself under pressure from Republican conservatives to ignore the Democrats' threats and to veto the defense authorization bill. Neither Carlucci nor National Security Advisor Powell evinced much enthusiasm for a confrontation; they worried that a veto might not produce a better bill and would certainly delay enactment of a military pay raise and other priority items. But as Quayle put it, Reagan, who would leave office anyway in a few months, had nothing to lose by rejecting "a bad deal--a bad bill." "The president

⁷² H. Rpt. No. 100-753: 26-27, 354-357.

⁷³ Congressional Record, July 14, 1988: S 9623-9628.

⁷⁴ "Republicans Split as Reagan Eyes Defense Veto," Congressional Quarterly Weekly Report, July 30, 1988: 2090-2091.

⁷⁵ Congressional Quarterly Weekly Report, July 16, 1988: 2001.

has more clout at the end of the session," Quayle was quoted as saying. "Congress is the one that wants to get home to campaign. . . . Power flows from the president."⁷⁶

(U) As it turned out, Reagan heeded the conservatives, his traditional source of support and most loyal allies. On August 3, 1988, insisting that it would "undercut the very foundation of our Nation's security," he vetoed the FY 1989 defense authorization bill and, in so doing, set the stage for a possibly prolonged battle over the defense budget. In turning down the bill Reagan cited, among other things, the sharp reductions and constraints that Congress wanted to impose on SDI, especially the space-based interceptor program, and the damaging impact this could have on U.S. negotiating leverage with the Soviets. "The bill would restrict, reorient, and limit funding for our Strategic Defense Initiative," Reagan contended. "Together, these restrictions and funding cuts would cripple our ability to fulfill the promise of effective strategic defense. The bill would hand the Soviet Union restrictions on our Strategic Defense Initiative program they have long sought."⁷⁷

(U) Republicans in Congress by and large greeted the President's veto with approval if not outright enthusiasm. Among many, according to the Congressional Quarterly reporting service, there was a sense of relief, at a time when opinion polls seemed to favor Democrats, that Reagan had finally called his political enemies' bluff and a feeling that the President's action would sharpen differences between Republicans and Democrats in the upcoming election; they thought the veto would underscore the GOP's commitment to a strong defense program and expose the Democrats, especially their presidential nominee Michael Dukakis, for taking an opposite and less popular position. As Senate Minority Leader Robert Dole saw it, "It's a national security veto of a political bill." But Democrats who were surveyed appeared equally determined to see the matter through to the finish, believing the advantage was theirs. "The Republicans are a victim of their own successes," Les Aspin said. "Foreign policy and the Soviet threat are lower on people's horizons and

⁷⁶ Congressional Quarterly Weekly Report, July 30, 1988: 2090.

⁷⁷ *Ibid.*, Aug. 6, 1988: 2223.

people want to vote for Democrats." Whether Aspin was right remained to be seen, but one thing was clear: a quick and easy compromise appeared unlikely.⁷⁸

Appropriations

(U) By early August 1988, with the defense authorization stymied because of Reagan's veto and with time running out in the session before the fall elections, Congress shifted its attention to the defense appropriations bill where the chances of immediate progress seemed more promising. Earlier, in June, while offering no direct justification, the House Appropriations Committee had recommended funding for SDI at a level of \$3.183 billion, the same as in the House-passed authorization.⁷⁹ Although the proposed spending bill contained none of the "fences" and other limitations in the House-passed authorization, the reduced amount of the appropriation, compared with what the administration had requested, drew an immediate protest from James C. Miller III, director of the Office of Management and Budget. Presaging Reagan's subsequent rejection of the defense authorization, Miller warned that the President would not hesitate to veto "any defense bill that would substantially impede our ability to execute the SDI program outlined to the Congress, either because of funding cuts or restrictions."⁸⁰ Democrats and even some Republicans at the time dismissed Miller's warning as political posturing and did not pay much attention. After a mere two hours of debate, the House on June 21 passed the FY 1989 defense appropriations bill, 360 to 53, including the committee's recommended amount of \$3.183 billion for SDI.⁸¹

(U) Democrats on the Senate Appropriations Committee, on the other hand, took the threat of a veto more seriously. As a precaution in case bargaining with the White House became

⁷⁸ "Veto of Defense Bill Ups the Political Ante," Congressional Quarterly Weekly Report, Aug. 6, 1988: 2143-2145.

⁷⁹ H. Rpt. No. 100-681: 185.

⁸⁰ Ltr, Miller to Jamie L. Whitten, Chm. HCA, June 1, 1988, quoted in Congressional Quarterly Weekly Report, June 11, 1988: 1614.

⁸¹ Congressional Record, June 21, 1988: H 4515.

necessary, they added stipulations which, as Democratic leaders had already threatened, effectively reinforced many of those that were likely to appear in the authorization bill. Reporting on June 23, 1988, the committee recommended an appropriation for SDI of \$3.717 billion, a reduction of over half a billion dollars from the Senate-passed authorization, but a sum which the committee insisted "complies with the expected authorization conference agreement on SDI." Of this amount, the committee earmarked \$114.9 million for transfer from SDI to the Army's tactical missile defense program and \$96.5 million for transfer to NASA to support development of an advanced space shuttle. The committee also fenced an additional \$792.5 million for laser research with long-term implications and for programs such as ERIS and HEDI which had more near-term potential for ALPS deployment. But significantly, the committee took no action with respect to the controversial space-based interceptor program. Even so, it was critical of the cost growth in SDIO's testing program and added a further requirement that the secretary of defense make greater use of independent "Red Team" (i.e., mock Soviet) analyses to project and assess Soviet countermeasures to SDI, a clear sign that some committee members--mainly Senators Johnston, Proxmire, and Bumpers--remained deeply skeptical of SDIO's claims of progress.⁸² In short, it was a bill that SDIO would doubtless find hard to live with, and one that Secretary of Defense Carlucci roundly condemned "as a prime example" of congressional "counter-productive micromanagement of Defense programs."⁸³

(U) Efforts on the Senate floor by SDI supporters to improve the program's prospects met with mixed success. On August 5, 1988, Wallop introduced an amendment adding back the \$500 million cut in committee, thus bringing the appropriation to essentially the same level as in the Senate-passed authorization. "The amendment," Wallop explained, "simply sustains the Senate's already adopted position."⁸⁴ But despite nearly unanimous Republican support, the measure came up seven votes short. Five days later, however, the Senate partially reversed itself and agreed by

⁸² S. Rpt. No. 100-402: 273-274; ltr, Proxmire, Johnston, Bumpers to Abrahamson, Aug. 11, 1988, SDIO External Affairs, Cong. Correspondence file.

⁸³ Ltr, Carlucci to Sen. Howell Heflin, Aug. 9, 1988, SDIO Director's Chron. file.

⁸⁴ Congressional Record, Aug. 5, 1988: S 10948.

voice vote to add \$250 million to SDI and to earmark another \$250 million for research and procurement programs affecting conventional forces. At the same time, after completing action on the appropriations bill early the next morning, August 11, the Senate again passed its version of the authorization bill, in effect paving the way, while members of the House and Senate Appropriations Committee agreed a spending bill, for representatives of the Armed Services Committee to reconvene in conference and try to draft authorizing legislation more to the administration's liking. Even though the two conferences were separate, those sitting in on the appropriations bill indicated that they would defer to the outcome of deliberations on the authorization.⁸⁵ A way out of the impasse was beginning to emerge, but it would not be another six weeks before a final settlement was in hand.

Final Action on the Budget and
the Restructuring of SDI

(U) To carry SDI forward through FY 1989 President Reagan had wanted \$4.5 billion; under the compromise reached in late September 1988, following talks between Aspin, Nunn, and Carlucci, he settled for an authorization of \$3.738 billion, of which Congress subsequently appropriated \$3.717 billion (see Table VII-2). The authorization included the same amount of money as in the bill the President had vetoed, but in deference to the President's objections it contained none of the limitations on spending and settled instead for a "gentlemen's agreement" from Carlucci that, in replanning its activities under the reduced funding level, SDIO would make no disproportionate reductions in programs of congressional interest (i.e, advanced laser technologies and ground-based kinetic-kill systems). The bill also reiterated Congress's concern over the proposed role of space-based interceptors in Phase I architecture and directed the secretary of defense to produce a report on the subject. It likewise reaffirmed that development and testing should comply with the narrow interpretation of the ABM Treaty, in accordance with administration testimony; and urged,

⁸⁵ Congressional Quarterly Almanac, 1988, 671.

as the House had wanted, that SDIO give priority to developing an ALPS deployment option within the terms of the ABM Treaty.⁸⁶

(U) Though not all that Reagan may have wanted, it was still a far more palatable bill than its predecessor. While Congress backed down from imposing most of the fences and other restrictions that many members wanted, it still insisted upon imposing conditions and funding limitations that would impede progress toward the President's goal of nation-wide protection against ballistic missiles. This in turn reflected the prevailing mood in Congress, not only that the missile shield Reagan envisioned, relying on existing and foreseeable technologies like the space-based interceptor, simply might not work; but also that the advantages such defenses might confer would not in any event be worth the price, either financially or in terms of the trade-offs that would have to be made with respect to arms control and the ABM Treaty. Hence the groundswell of congressional support for more long-term research and for such interim measures as ALPS, two areas which skirted the difficult decisions and heavy commitments that the administration's proposed Phase I deployment would raise. Though there was little question that Congress would not continue to back SDI, it was clear also that more members than ever harbored reservations and that sentiment to curb the program was growing.

(U) Obviously, the administration had to do something to bolster congressional confidence in SDI, especially the confidence of moderates in both parties whose votes and continued support were crucial to the program's future. As a first step, at a unique joint session of the House and Senate Armed Services Committees on October 6, 1988, Abrahamson, accompanied by Under Secretary of Defense for Acquisition Robert B. Costello and General Robert T. Herres, USAF, Vice Chairman of the Joint Chiefs of Staff, outlined the results of the recently concluded review of SDI by the Defense Acquisition Board and the administration's tentative plans for restructuring SDI. This was to be Abrahamson's last appearance before these committees. A few days earlier, on September 27, the Pentagon had announced that as of January 1989 Abrahamson would retire from the military and turn over his duties as director of SDIO to Lt. Gen. George L. Monahan, Jr., USA.

⁸⁶ H. Rpt. No. 100-989: 25-27,356-359. For appropriations, see H. Rpt. No. 100-1002: 83-86.

Abrahamson had in fact tendered his resignation on July 26, 1988, but for unexplained reasons it had not been made public at the time.⁸⁷

(U) Though not as extensive as some critics may have hoped or been led to expect, the proposed restructuring of SDI clearly included a more varied set of options than anything the administration had discussed with Congress in the past. However, the immediate aim of the program was still to lay the groundwork for Phase I deployment sometime in the mid- to late-1990s. To keep to this schedule the DAB had recommended--and Secretary of Defense Carlucci had approved--a four-part "stepped approach" that included continued emphasis on space-based defenses; possible early deployment of space-based sensor systems; maintenance of the option to develop and deploy a limited protection system, like ALPS, relying on land-based interceptors; and adequate support for a balanced, long-term weapons research program, a concession to Spratt and others who thought that SDI was neglecting advanced laser technologies. Given this approach, Costello estimated that Phase I deployment could be reduced to as low as \$69 billion, as opposed to the \$75 to \$150 billion previously estimated.⁸⁸

(U) The principal disclosure at the hearing was that SDIO was paring back research on the controversial space-based interceptor, or SBI, in favor of a different space-based kinetic-kill technology known as "Brilliant Pebbles," a mid-course intercept system under study at the Lawrence Livermore National Laboratory. Exploiting recent rapid advances in the miniaturization of high-technology weapons parts, Brilliant Pebbles would substitute small, cheap, brainy rockets for the big, bulky, and more costly SBIs. Perhaps the most novel feature of Brilliant Pebbles was its built-in optical sensor which would eliminate much of the need for outside guidance from large tracking satellites. With Brilliant Pebbles thus less dependent on external command and control relays, it promised to be less vulnerable to Soviet countermeasures and considerably less expensive

⁸⁷ Washington Post, Sep. 28, 1988, fed. page.

⁸⁸ U.S. Congress, Senate, Committee on Armed Services, and House, Committee on Armed Services, Joint Hearings: Restructuring of the Strategic Defense Initiative [SDI] Program, 100:2 (Washington, D.C.: G.P.O., 1989), 13-14.

to deploy, thereby undercutting two of the most persistent criticisms of space-based defenses.⁸⁹ But even if Brilliant Pebbles lived up to its potential, Herres warned that SDI still faced "tough development challenges" and that it would be a number of years, assuming a decision to deploy, before SDI would make "a militarily significant contribution to deterrence." For this reason, Herres acknowledged, the Joint Chiefs had worried about the "big bite" SDI would take out of the strategic budget, and had therefore not been especially enthusiastic about proceeding with deployment. He added, however, that these new, lowered spending estimates, in the Chiefs' opinion, now made a deployed SDI less of a competitor with other important defense programs and therefore a more attractive option to pursue.⁹⁰

(U) By and large, members of the two committees tended to agree with one another that the proposed restructuring of SDI's architecture was a more reasonable and realistic approach to the problem of strategic defenses, at least from a technical point of view. What it seemed to suggest, in the view of Rep. John R. Kasich (R., Ohio), was that the administration had finally conceded that a totally perfect, leak-proof system, as Reagan had originally envisioned, need not be the standard against which SDI's progress should be measured. "I think most people now agree," Kasich said, "that that is not something which can be achieved within any short period of time. But, at the same time, that is no reason not to pursue SDI."⁹¹ Yet, even if a way around all the technological obstacles could be found, there were enormous political problems yet to be addressed--arms control, the ABM Treaty, and the future impact of space-based defenses on the strategic military balance. Thus, while members of the two committees left the hearing generally concurring that SDI was headed in a more promising direction--one that Congress and the next administration could more easily mutually support--they likewise remained concerned for the ultimate implications and outcome of the program.

⁸⁹ For an unclassified analysis of the potential of the Brilliant Pebbles program, see William J. Broad, "What's Next for 'Star Wars'? 'Brilliant Pebbles,'" New York Times, Apr. 25, 1989: C1-C2.

⁹⁰ Joint Hearing: Restructuring of SDI, 18-19.

⁹¹ *Ibid.*, 60.

FIGURE VII-2
SUMMARY OF CONGRESSIONAL ACTION ON
THE FY 1989 SDIO BUDGET
(\$ in millions)

President Requested	\$ 4,546
House-passed Authorization	3,183
Senate-passed Authorization	4,271
Congress Authorized	3,738
House-passed Appropriation	3,183
Senate-passed Appropriation	3,967
Congress Appropriated	3,717

Sources: H. Rpt. No. 100-989: 356; and H. Rpt. No. 100-1002: 83.

SDI and the 1988 Election

(U) Whether the proposed restructuring of SDI actually went through as outlined depended less in this instance on reactions in Congress than it did on the preferences of voters who in November 1988 would select Ronald Reagan's successor. During Reagan's presidency SDI enjoyed high priority and close White House attention, not only because of Reagan's personal interest in the program, but also because of its appeal to the conservative wing of the Republican party, the bedrock of Reagan's political support. But as the 1988 presidential election drew closer, it was increasingly apparent that the next administration, whether Republican or Democrat, might not be inclined to invest as much energy and resources in SDI as Reagan had been. Indeed, even if Vice President George Bush, the Republican candidate, won the election, chances were good that SDI would be downgraded in priority. And if the Democrats won, it was entirely possible that SDI would become a relic of the past.

(U) Unlike the 1984 election, which pitted Reagan's unabashed conservatism against Walter Mondale's unabashed liberalism, the 1988 election witnessed few battles over political philosophy, but lots of skirmishing over specific issues, with defense and SDI among them. Even so, the 1988 presidential election was not a referendum on SDI per se, nor did SDI play a more significant role than it had in previous elections. Rather, SDI was at most a symbol of where the two parties stood with respect to one another on defense matters, and to this degree its impact was more rhetorical than substantive.

(U) For proponents of SDI the worst-case outcome would have been a victory by the Democratic presidential candidate, Governor Michael Dukakis of Massachusetts, whose views on defense and foreign affairs aligned him with the left wing of the Democratic party. Since the Democrats' platform made no specific reference to SDI, Dukakis was largely free to develop his own position, and he sided initially with liberals of the Dellums-Boxer persuasion in advocating a level of effort reduced to about \$1 billion annually for basic research only. His arguments against SDI were that it was technologically unsound, an extravagant expense at a time of more urgent domestic needs, and a barrier to the conclusion of arms control agreements with the Soviets. "We need star

schools," he liked to tell audiences, "not Star Wars." But as election day neared, Dukakis found his early lead in opinion polls slipping, and he moved to bolster his support among moderate voters by softening his attacks on defense programs, including SDI. Overnight, his references to SDI as "fantasies in the sky" disappeared from his speeches and interviews. It proved, however, to be too little, too late.⁹²

(U) For George Bush the problem was to maintain the backing of Republican conservatives who doubted his commitment to SDI. Although Bush repeatedly stated that he supported vigorous research and development, many conservatives, including columnist William F. Buckley, Jr., questioned whether he would pursue the program with the same enthusiasm as Reagan had shown. Buckley claimed that Republican campaign strategists had polling data showing that SDI was not a "winning" vote-getting issue, and that they had therefore decided to softpeddle the program.⁹³ Though Bush's handlers denied the existence of such data, a poll released by the Gallup organization on July 7, 1988, indicated that exactly half (50 percent) of likely voters opposed further development of SDI, while 38 percent were in favor. In contrast, a poll done around this same time under the sponsorship of Americans Talk Security (ATS), a non-partisan Massachusetts-based organization, found the numbers almost exactly reversed, with 51 percent in favor and 39 percent opposed. But as ATS's retrospective analysis of opinion polls also showed, public support of SDI had peaked around October 1986, and had been dropping ever since. Given these mixed signals, Bush's caution in pushing SDI was hardly surprising.⁹⁴

(U) As it turned out, Bush adopted a somewhat ambiguous position on SDI. On the one hand, since the Republican party platform was quite explicit in advocating "the need for

⁹² For the evolution of Dukakis's position on SDI, see the following: "Dukakis Has to Watch Two Fronts on Defense," Congressional Quarterly Weekly Report, Aug. 6, 1988: 2145; "Dukakis a Symbol of Democrats' Defense Dilemma," *ibid.*, Oct. 22, 1988: 3045-3049; and "Dukakis Softens Rhetoric on SDI," New York Times, Sep. 9, 1988: A10. For the text of the Democratic party platform, see Congressional Quarterly Weekly Report, July 16, 1988: 1967-1970.

⁹³ See William F. Buckley, Jr., "Bush and SDI: What's Going On?" Washington Post, Aug. 30, 1988: A23.

⁹⁴ Gallup Poll, July 7, 1988; ATS Poll, June 1988, both in American Public Opinion Survey collection (microfiche), Pentagon Army Library.

deployment" of SDI, Bush had no choice but to stand behind the program. But at the same time he also indicated that "full deployment" would be "very expensive" and might have to be held in abeyance pending further research. Senator Sam Nunn's ALPS proposal, he said, might be a more viable option and was worth studying.⁹⁵ Equally frustrating to conservatives was Bush's refusal to endorse space-based testing that might violate the ABM Treaty. "My view is, research and development is [sic] testing," he insisted. "You have to test." But whether this included testing under the broad interpretation of the ABM Treaty, Bush never said.⁹⁶

(U) To help allay the right-wing's concerns Bush chose as his running mate Senator Dan Quayle of Indiana, a leading proponent of SDI and an emerging leader among conservatives. But at the same time Bush surrounded himself with many close aides who were skeptical of SDI, such as former Senator John Tower, later Bush's ill-fated nominee to be secretary of defense, who advocated a more "realistic" approach to SDI by pursuing "what was feasible from a technological and political standpoint;"⁹⁷ and Lt. Gen. Brent Scowcroft, USAF (Ret.), soon to be named Bush's national security advisor, who was said to regard SDI as "a wild fantasy."⁹⁸ The overall effect was to downgrade SDI's importance, not only as a campaign issue but also as a national objective, and to assure that in the next administration SDI would play a diminished role.

(U) All the same, Bush's victory doubtless saved SDI. Had Dukakis won, SDI would have faced at best an uncertain fate. With a Democratic Congress and a Democratic White House, SDI would have been eviscerated, the program broken up, and funding slashed dramatically. While Bush may have lacked Reagan's ardor for the cause, he was still committed to seeing the program carried forward, though at what rate of progress remained to be seen. Clearly, Bush would also have to work more closely with Congress on SDI than Reagan had been willing to do. And this, in turn, would surely dictate more compromises and concessions resulting in changes in the program. After

⁹⁵ Bush interview in New York Times, Aug. 26, 1988: A1, D17.

⁹⁶ "Bush Acts to Reassure Conservatives on SDI," Washington Post, Aug. 31, 1988: A16.

⁹⁷ John Tower, Consequences: A Personal and Political Memoir (Boston: Little, Brown, 1991), 118.

⁹⁸ Bob Woodward, The Commanders (New York: Simon and Schuster, 1991), 51.

nearly five years of effort under Reagan, the task of developing space-based defenses, the first step as the President saw it toward rendering nuclear weapons "impotent and obsolete," was about to enter a new phase, with the outcome still a distant prospect.

CONCLUSION

(U) In his memoirs Ronald Reagan looked back on his eight years in the White House with much satisfaction, especially proud that he had set in motion the Strategic Defense Initiative, the first step toward rendering nuclear weapons "impotent and obsolete," starting with long-range ballistic missiles, and eventually bringing the era of mutual assured destruction to an end.¹ This was indeed a very tall order, perhaps the most ambitious undertaking in American history, often likened in scope and complexity to the Manhattan Project of World War II which had produced the first atomic bombs, and the Apollo space program of the 1960s which had landed men on the moon. But these programs had had definite ends in view. SDI was different. Its aim was to negate and hold in check a threat of vast proportions, and to do so indefinitely, relying on technologies of the most advanced and sophisticated design, many of which were highly experimental or little more than drawing board concepts. In these circumstances, the crucial questions overshadowing SDI from its inception were: Can it be done? And, if so, at what cost and other consequences?

(U) Because of the uncertainties surrounding the feasibility of SDI, it became the object of intense debate, both on technical grounds and politically. At the outset of the program, most members of Congress gave SDI the benefit of the doubt. But by the end of Ronald Reagan's presidency in January 1989, the political momentum that had supported and sustained SDI for nearly six years was beginning to ebb. Not only had SDI's enemies and critics on Capitol Hill achieved significant control over the SDI budget and other critical aspects of the program, but also, congressional supporters who wanted to proceed with some form of deployment were losing hope of ever seeing Reagan's cherished dream become reality. The result was a program less well funded, less well along toward realizing its goals, and clearly less credible from a technical standpoint than either Reagan or its original architects on the Fletcher panel had imagined.

¹ Ronald Reagan, An American Life (New York: Simon and Schuster, 1990), 547-548.

(U) Although Congressional support for SDI was always fairly broad during Reagan's presidency, with even ardent opponents paying lip service to the need for research into strategic defenses, it was never very deep. Congress had a history of supporting R&D programs, and SDI was no exception. But while many members were ready and willing to vote money for SDI research, they shied away from endorsing it to the point of committing themselves to deployment as well. As much as Congress may have deemed the program worth pursuing at the R&D level, its members, by and large, did not want to be bound to future expensive commitments, condone actions that might accelerate the militarization of outer space, or provoke a new round of escalation in the U.S.-Soviet nuclear arms race. In short, Congress adopted an open, but cautious, attitude toward SDI.

(U) Those sitting in Congress during these years fell, as a rule, into one of three broad categories: those who passionately supported SDI; those who were equally passionately against it; and those in the middle, who constituted the vast majority. In these circumstances the major legislative challenge facing Reagan and his advisers was to forge a consensus that would support and sustain SDI at a level at least generally consistent with administration objectives. This, in turn, necessitated compromise, which produced a program far too ambitious and well funded to suit some (mainly liberal Democrats), and far too restricted and limited in scope to please others (chiefly conservative Republicans). The result was an uneasy *modus vivendi* that nettled practically all concerned.

(U) At the core of the legislative controversy over SDI was the liberal-conservative split, which had its roots in the anti-ballistic missile controversy of the late 1960s and early 1970s. It was at that time, with the divisiveness of the Vietnam War at its height, that the United States experienced its first debate over strategic defenses. The systems then under development depended on land-based interceptor missiles armed with nuclear warheads derived from designs dating from the 1950s which would have had marginal effectiveness against a large attack by enemy missiles. Critics, including many liberals in Congress who were alienated by Vietnam, seized on this inherent weakness and used it, along with other arguments, to try to undermine public and congressional confidence in the program. To a considerable extent they succeeded. Even though Congress eventually approved a limited ABM deployment, it did so reluctantly, mainly in anticipation that these less-than-satisfactory defensive systems would be used as "bargaining chips" in arms control talks with

the Soviets. The ensuing negotiation of the 1972 ABM Treaty further reduced congressional interest in strategic defenses and was soon followed by the congressionally-mandated closure of the only U.S. ABM installation, that at Grand Forks, North Dakota.

(U) Despite waning congressional interest in ballistic missile defense, U.S. research in this and related areas continued, albeit on a much reduced pace and scale from the 1950s and 1960s. Meanwhile, the Soviet Union not only pursued a vigorous offensive strategic buildup; it also continued to make refinements and upgrades in its defensive capabilities, limited though they were by the 1972 ABM Treaty. By the late 1970s, the United States began to respond, first, with plans to upgrade its own strategic offensive forces; and second, with more ambitious research into strategic defenses, including the possible application of kinetic-kill mechanisms, space- and ground-based lasers, and other new directed-energy technologies. All the same, research in the latter areas remained scattered, and there were signs from Capitol Hill that, unless the administration did something to consolidate proliferating directed-energy programs, Congress would act unilaterally.

(U) Nonetheless, by the early 1980s, most members of Congress remained either indifferent to or uninterested in strategic defenses. One notable exception was Senator Malcolm Wallop of Wyoming, a conservative Republican whose uneasiness over the doctrine of mutual assured destruction caused him to explore other options, focusing particularly on space-based defenses utilizing chemical laser technology. Outside Congress others, including Edward Teller, the nuclear physicist, and Daniel O. Graham, head of the High Frontier organization, advanced similar space-based defensive concepts which drew warm reactions within conservative circles. But it was not until Reagan's speech of March 23, 1983, that a fully revitalized ballistic missile defense research program appeared likely. This led to SDI, which Republican conservatives promptly hailed and embraced as one of their most cherished causes.

(U) For Republican conservatives in Congress, SDI held irresistible appeal. First, SDI was significantly different from all earlier BMD programs, which, except for a few drawing board concepts like BAMBI, had all been nuclear-armed ground-based point defense systems, capable only of protecting high priority military facilities (e.g., ICBM silos) or vital command-and-control installations. SDI, in contrast, was to be a nuclear free peace shield built upon a layered array of

space-based strategic defenses affording broad, comprehensive protection of the entire United States, including its population centers. The ultimate purpose of such a system, as Reagan and supporters of SDI liked to point out, would be to lessen, if not end, the terrifying prospect of nuclear war and of having to rely on military policies and postures built on the threat of MAD, or mutual assured destruction. Not all Republican conservatives, to be sure, shared Reagan's vision. Senator Barry Goldwater, for one, never really believed in SDI; he preferred instead a strong strategic offensive capability as the country's first line of defense. But he went along with SDI anyway, out of party loyalty and in deference to the President's legislative agenda. How many others in the President's party may have followed suit for similar reasons is unclear.

(U) Not only was SDI supposed to end MAD, it was supposed to do so by ushering in a new era, one often described as *mutual assured survival*. Whereas congressional liberals tended to be more in favor of arms control agreements with the Soviets to lessen the threat of nuclear holocaust, their conservative colleagues looked to unilateral measures as being more likely to succeed in the long run, than the *a deux* approach. The operative assumption among congressional conservatives was that SDI would prove technically feasible, a rather large assumption that required a "keep-the-faith" mentality among even SDI's most loyal supporters. But if the scientific community could rise to the challenge, the net result would be more than worth the investment of energy and resources. This gave conservatives a strong moral argument they could use to blunt criticism from the left of the Reagan administration's military buildup, the largest in peacetime American history, and of its lack of progress (until the signing of the INF Treaty) on arms control. With SDI pointing the way toward a world freed from the menace of nuclear war, Reagan and his congressional allies could lay claim to the high moral ground that was once the almost exclusive turf of the arms control and disarmament lobby and the peace movement.

(U) Related to this was the assumption shared by many Republican conservatives that SDI would contribute a lasting legacy, stronger and more enduring than any other, which would preserve and extend the "Reagan revolution" for decades. SDI was not merely an end in itself; it was the symbol, to many congressional conservatives, of the fundamental change they hoped to see in American politics. As SDI went forward they expected it to give renewed meaning to such

conservative values as a strong, anti-Soviet defense posture, and to build a national consensus to further that goal long after Reagan left office. Ultimately, in other words, conservatives looked to SDI--and to the promise of safety and security it held out--to produce a basic political realignment and to help set the national agenda in their favor for years to come.

(U) Feeding these expectations were the more immediate political dividends that congressional conservatives saw to be reaped. According to most reliable opinion polls conducted in the aftermath of Reagan's 1983 speech, and for several years thereafter, SDI enjoyed a generally high public approval rating, a sign that voter support of candidates who favored SDI would follow. However, this did not turn out to be the case in most House and Senate races in the 1984, 1986, and 1988 elections. Indeed, in very few contests was SDI a notable factor at all, and in those rare instances where it was an issue, candidates supporting SDI invariably lost. But at the national level, in the 1984 and 1988 presidential contests, SDI played a somewhat different and more prominent role. For Walter Mondale and Michael Dukakis, both running as liberal Democrats, their criticism of SDI may not have cost them the elections. Yet it was certainly of little help to their cause. Voters on the whole may have had doubts and questions about SDI, but they were sufficiently convinced that the program had merit to give preference to presidential candidates who thought likewise.

(U) Still, it was the treatment of SDI by Congress that Reagan knew would determine the program's fate, and here it was plainly apparent that he needed more than conservative Republican backing. Even so, he offered concessions grudgingly and accorded low priority to the grubby--but imperative--task of consensus building by carving out a legislative strategy that tried to hold Congress at a distance from the inner workings of SDI. At the same time, he and his advisers all too often resorted to conflicting and contradictory explanations of SDI's purpose and rationale, leaving members of Congress either confused or feeling ill-informed as to what they were voting on. Looking back, Secretary of Defense Weinberger rued the lack of closer congressional collaboration, beginning with the President's decision in 1983 not to consult with members of Congress before making his historic speech. That decision, Weinberger felt, arose from the "Byzantine efforts" of the White House staff to avoid press leaks that might have spoiled the "surprise." "The result,"

Weinberger observe, "was that strong opposition developed immediately, and many [in Congress] considered the proposal something to be derided or killed as quickly as possible."²

(U) The strong congressional opposition that initially greeted the President's proposal of SDI should have been a clear signal that it would experience future difficulties, which only closer, more open consultation might have avoided. However, the enthusiasm of the moment that invariably envelopes the launching of a new program, especially one as ambitious as SDI, no doubt obscured the political pitfalls; and with Republicans controlling the Senate from 1981 to 1987, Reagan knew he had leverage to demand--and get--most of what he wanted. Concessions and compromises when SDI was first proposed were not, from the administration's standpoint, even up for discussion. In consequence, members of Congress were privy to few details of the administration's plans for SDI, and were not even consulted until those plans--i.e., the Fletcher and Hoffman panel studies--had passed final review. It was, all in all, a less than auspicious beginning.

(U) In fact, though, very few members of Congress ever totally opposed SDI. Indeed, at the outset, because the program was new and relatively small, Congress generally went along with the administration's funding requests. But as these requests grew, starting in 1985 when SDIO's proposed budget more than doubled, they generated increased interest from both houses of Congress in having more voice in the program. What opponents and critics usually said was that the program was too big or too ambitious, and should be scaled back to more modest proportions. The most strident criticism and calls for the largest cuts came from liberal Democrats, such as Dellums, Boxer, and Schroeder in the House, and Proxmire, Levin, and Kennedy in the Senate, among others. But they were often less effective at shaping fellow members' opinions (and votes) and at curbing the program than their more moderate colleagues, like Democrats J. Bennett Johnston of Louisiana in the Senate, and Charles E. Bennett of Florida in the House, who eventually emerged as the bellwether of majority sentiment in the lower chamber.

(U) Some congressional opponents of SDI also worked closely with lobbying and interest groups that adopted anti-SDI positions. Among the more prominent and active of these organizations

² Caspar Weinberger, Fighting for Peace: Seven Critical Years in the Pentagon (New York: Warner, 1990), 305, 308.

were Common Cause, which had its roots in the anti-Vietnam War syndrome of the 1960s; the Arms Control Association; and several purporting to represent the scientific community, including the Union of Concerned Scientists and the Federation of American Scientists. These organizations had long histories of taking left-of-center political positions, and they were extremely effective at generating attention for their causes. But whether they changed many votes in Congress is questionable. As long as opinion polls showed SDI with a favorable rating, most members were satisfied to give it whatever continued support they considered necessary and politically expedient.

(U) Of more visible impact on members' thinking and voting behavior were the findings of the various congressional advisory bodies--the Congressional Budget Office, the Congressional Research Service, the General Accounting Office, and especially the Office of Technology Assessment. The latter, from the outset of the program, took a close interest in monitoring SDI's technical prospects and progress. Its early studies, beginning with the outside analysis done by Ashton Carter in 1984, did much initially to cast doubt on the technological feasibility of SDI. Subsequent reports--most notably OTA's 1988 study--raised major questions about the efficacy of such crucial components as computer software and kinetic kill vehicles, and played an important part in turning Congress against the space-base interceptor program, around which the administration had fashioned its Phase I deployment architecture. As estimated by Republican Representative John R. Kasich of Ohio, somewhere around 90 percent of House members (and probably a comparable figure in the Senate) had little more than a rudimentary understanding of the complex, technical aspects of SDI.³ Reports such as these, in consequence, often substituted for direct, firsthand knowledge.

(U) Findings such as the OTA's studies also did nothing to enhance the prestige and credibility of the Strategic Defense Initiative Organization and especially its director, Lt. Gen. James A. Abrahamson. Conceived as an elite organization answerable directly to the secretary of defense, SDIO operated outside the normal Pentagon bureaucracy under relaxed supervision. This made it a natural target for congressional investigators and put heavy pressure on Abrahamson to justify and explain SDIO's seemingly freewheeling and unorthodox ways of doing business. But the most

³ U.S. Congress, House, Committee on Armed Services, Special Panel on the Strategic Defense Initiative, Hearings, 100:2 (Washington, D.C.: G.P.O., 1989), 294.

common complaint from SDIO's detractors was that Abrahamson (and by extension those on his staff) was overstating his organization's accomplishments, glossing over technological shortcomings and failures, and generally misrepresenting the program's progress and potential. Once the seeds of suspicion were sown, it became almost impossible to sort out the truth, so that whatever Abrahamson said was open to question. As the attacks on Abrahamson's veracity intensified, his position became virtually untenable, his departure inevitable.

(U) Mismanagement and dissembling were not the only arguments that congressional critics marshalled against SDIO and the program it managed. More often than not, opposition centered on SDI's growing research costs, deemed by critics a luxury at a time of mounting Federal budget deficits, and the prospect of someday being presented with a bill for tens, or even hundreds of billions of dollars to finance deployment. Although SDI research constituted a small fraction of the DoD budget, the fact that it came to be the Pentagon's biggest R&D program in the 1980s helped to increase its political visibility and made it an ideal candidate for absorbing cuts. Some critics, liberal Democrats in particular, saw SDI as a diversion of resources from more deserving domestic programs, while others charged that it used up money needed elsewhere for R&D or that would be better spent on such things as bolstering conventional forces. Even moderates who were inclined to support SDI were not immune to these arguments, with the result that SDI never received sufficient funding to conduct the full range of research that the Fletcher panel had originally urged, or that SDIO proposed in its annual budgets (see Appendix IV). Rather, as the accompanying chart indicates, Congress on average reduced SDIO's budget by just over 25 percent from what the President requested.

Table C-1
SDIO BUDGET SUMMARY
FYs 1985-1989
(\$ in millions)

	Requested	Appropriated	% Reduced
FY1985	\$ 1,777	\$ 1,400	-21.2%
FY1986	3,722	2,750	-26.1%
FY1987	5,302	3,250	-38.7%
FY1988	5,221	3,621	-30.1%
FY1989	4,546	3,717	-18.2%
TOTALS	\$20,068	\$14,701	-25.7%

(U) Funding cuts were, of course, the opposition's preferred and most effective method of slowing SDI. Another was to impose "fences" that controlled the use of funds and other legal restrictions on what SDIO could do. As a rule, members of Congress balked at fencing because it left them open to charges of meddling where they had no expertise and of trying to micromanage administration programs to the possible detriment of the overall objective. But as more details of the administration's plans for SDI became available, especially with respect to the Phase I deployment architecture, opponents in the House resorted increasingly to fencing, as in the case of the Spratt amendment to the FY 1989 defense authorization, to curb what they considered dubious technologies such as the space-based interceptor. The Senate, on the other hand, rarely resorted to fencing, with the result that when it came time to reconcile authorization and appropriations bills in conference, tradition generally prevailed and the fences came down.

(U) Two congressionally-mandated restrictions that *did* prevail and become law were, first, a requirement that the administration's testing of SDI components comply with the so-called narrow (or traditional) interpretation of the 1972 ABM Treaty, thus prohibiting adoption of the more lenient "broad" interpretation which the administration had floated as a trial balloon; and second, that any future deployment adhere to the "Nitze criteria" specifying that strategic defenses be technically feasible, survivable, and "cost-effective at the margin." Both restrictions, it should be emphasized, derived from and were consistent with policies Reagan had approved, so that in a sense Congress could claim that it was doing nothing more than reiterating the administration's stated position. Nevertheless, it is somewhat indicative of the depth of suspicion which came to prevail on Capitol Hill that Congress did not trust the administration to live by its own pronouncements and felt compelled to go a step further by enacting these provisions into law.

(U) Psychologically, if not legally, these two restrictions erected a barrier to further SDI development that some members of the Reagan administration found intolerable. It seemed clear, within the Pentagon and especially within the Office of the Secretary of Defense, that these measures were designed for nothing more than to stifle SDI's potential, to cripple its progress, and to undermine the public's confidence in the program. From this perspective, the most onerous of the two restrictions was by far Congress's imposition of the narrow interpretation. According to Weinberger, Perle, and their supporters on Capitol Hill, the narrow interpretation would doom SDI to limited and inconclusive testing which would play into the hands of opponents who wanted to discredit and eventually shut down the program. Not all agreed from a technical standpoint that the narrow interpretation was such a hindrance, as the Everett panel pointed out in its 1988 review of SDI. This assumed, however, a significantly more modest program--one more along the lines of Nunn's ground-based ALPS proposal--than the space-based population defense that Reagan had originally envisioned. To reach the President's goal someday, amendment or abrogation of the ABM Treaty were the only choices. The administration's proposed broad interpretation was really nothing more than a stopgap measure, and its implementation might in the long run have made for an easier transition.

(U) A further administration complaint was that these restrictions would weaken the U.S. negotiating position at the Geneva arms talks and, in effect, concede to the Russians many of the same restraints on SDI that they had been unable to secure through negotiations. Many members of Congress, echoing administration sentiment, readily acknowledged that SDI was a major factor in the arms negotiations, that it had contributed significantly to bringing the Soviets back to the bargaining table, and that it gave the United States leverage which would doubtless produce better future agreements, more favorable to American interests. But at the same time most members also remained strong supporters of the ABM Treaty and were unwilling to see it compromised lest a bad precedent be set for the handling of future arms control agreements. Such sentiments were fairly widespread in both chambers, but especially so in the Senate, whose members felt they had a constitutional role to protect in the treaty-making process. Whether this resulted in de facto concessions to the Soviets, as some administration officials claimed it would, was a matter of conjecture as far as Congress was concerned.

(U) There can be no doubt that it was the controversy over the interpretation of the ABM Treaty that did more damage to SDI's prospects in Congress than anything else. As valid as its case for the broad interpretation may have been, the administration's inept handling of its presentation, coupled with the implied disregard for congressional prerogatives and sensitivities that the broad interpretation suggested, tended to alienate congressional opinion (even among members otherwise favorably disposed toward SDI) and to raise questions about the administration's motives. Was the purpose of the broad interpretation, as the administration insisted, to facilitate further testing and research on SDI? Or was it a ploy, burning one's bridges, so to speak, to secure a permanent commitment to SDI by rendering the ABM Treaty null and void? Either way, the possibility of an escalation of the arms race into outer space--in effect, a reversal of American policy dating from the 1950s--loomed large. Thus far, most in Congress agreed, the ABM Treaty had been generally successful at averting such an escalation. Was it worth the risk, then, of possibly overturning the treaty simply to accelerate the program's research schedule by what the Defense Department's own experts estimated to be a few years? Conservative Republicans, eager to see SDI deployed, maintained that it was, arguing that from all available intelligence the Soviets, because of their

Krasnoyarsk radar and other infringements, had already hopelessly compromised the ABM Treaty. But the overwhelming majority, aware that the intelligence community had been wrong before, was willing to give the Soviets the benefit of the doubt. In any event, they wanted to hang on to the treaty until a more viable alternative--certainly something more viable than SDI had yet been able to generate--presented itself.

(U) In these circumstances, it was obvious by the last year or so of Reagan's presidency that SDI was nearing a legislative impasse and would not in the future be likely to receive the funding increases it was used to getting. In the future, even staying even might be difficult. Not only were many members of Congress having serious doubts about SDI, but also they seemed to prefer a less ambitious, scaled-back program that avoided for the time being such controversial questions as what to do about the ABM Treaty or whether to embark on risky tests of possibly unsound and unreliable technologies like the space-based interceptor. To meet this growing crisis of confidence in SDI Secretary of Defense Carlucci had no choice but to undertake during the course of 1988 a top-to-bottom review of the program, resulting in a restructuring designed for the most part to allay these congressional worries and to appease congressional critics.

(U) Reagan's presidency thus ended with SDI still a distant vision. Much groundwork had, of course, been laid, with Congress playing an active, if not always cooperative role. Most members of Congress supported SDI, some more ardently than others, but even critics conceded that there might come a day when strategic defenses could prove necessary. Accordingly, Congress was willing to promote research as a prudent precaution, but unwilling to commit itself to endorsing wide-ranging testing that might doom the ABM Treaty and commit the country to a policy of deployment. This left the ultimate future of SDI undecided and recast the program more as an issue of partisan ideology and partisan politics than of national security. Though Reagan could not have possibly foreseen this turn of events, he should not have been surprised.

Appendix 1

ARMS CONTROL AND DISARMAMENT AGREEMENTS

Texts and Histories of Negotiations

United States Arms Control and Disarmament Agency

**Treaty Between the United States of America and the Union of Soviet Socialist Republics on the
Limitation of Anti-Ballistic Missile Systems**

Signed at Moscow May 26, 1972

Ratification advised by U.S. Senate August 3, 1972

Ratified by U.S. President September 30, 1972

Proclaimed by U.S. President October 3, 1972

Instruments of ratification exchanged October 3, 1972

Entered into force October 3, 1972

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the premise that nuclear war would have devastating consequences for all mankind,

Considering that effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons,

Proceeding from the premise that the limitation of anti-ballistic missile systems, as well as certain agreed measures with respect to the limitation of strategic offensive arms, would contribute to the creation of more favorable conditions for further negotiations on limiting strategic arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament,

Desiring to contribute to the relaxation of international tension and the strengthening to trust between States,

Have agreed as follows:

Article I

1. Each party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures in accordance with the provisions of this Treaty.
2. Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.

Article II

1. For the purpose of this Treaty an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory, currently consisting of:

(a) ABM interceptor missiles, which are interceptor missiles constructed and deployed for an ABM role, or of a type tested in an ABM mode;

(b) ABM launchers, which are launchers constructed and deployed for launching ABM interceptor missiles; and

(c) ABM radars, which are radars constructed and deployed for an ABM role, or of a type tested in an ABM mode.

2. The ABM system components listed in paragraph 1 of this Article include those which are:

- (a) operational;
- (b) under construction;
- (c) undergoing testing;
- (d) undergoing overhaul, repair or conversion; or
- (e) mothballed.

Article III

Each Party undertakes not to deploy ABM systems or their components except that:

(a) within one ABM system deployment area having a radius of one hundred and fifty kilometers and centered on the Party's national capital, a Party may deploy: (1) no more than one hundred ABM launchers and not more than one hundred ABM interceptor missiles at launch sites, and (2) ABM radars within no more than six ABM radar complexes, the area of each complex being circular and having a diameter or no more than three kilometers; and

(b) within one ABM system deployment area having a radius of one hundred and fifty kilometers and containing ICBM silo launchers, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, (2) two large phased-array ABM radars comparable in potential to corresponding ABM radars operational or under construction on the date of signature of the Treaty in an ABM system deployment area containing ICBM silo launchers, and (3) no more than eighteen ABM radars each having a potential less than the potential of the smaller of the above-mentioned two large phased-array ABM radars.

Article IV

The limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges. Each Party may have no more than a total of fifteen ABM launchers at test ranges.

Article V

1. Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, or mobile land-based.

2. Each Party undertakes not to develop, test, or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, not to modify deployed launchers to provide them with such a capability, not to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload of ABM launchers.

Article VI

To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by the Treaty, each party undertakes:

(a) not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode; and

(b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

Article VII

Subject to the provisions of this Treaty, modernization and replacement of ABM systems or their components may be carried out.

Article VIII

ABM systems or their components in excess of the numbers or outside the areas specified in this Treaty, as well as ABM systems or their components prohibited by this Treaty, shall be destroyed or dismantled under agreed procedures within the shortest possible agreed period of time.

Article IX

To assure the visibility and effectiveness of this Treaty, each Party undertakes not to transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

Article X

Each Party undertakes not to assume any international obligations which would conflict with this Treaty.

Article XI

The Parties undertake to continue active negotiations for limitations on strategic offensive arms.

Article XII

1. For the purpose of providing assurance of compliance with the provisions of this Treaty, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.

2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.

3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Treaty. This obligation shall not require changes in current construction, assembly, conversions, or overhaul practices.

Article XIII

1. To promote the objectives and implementation of the provisions of this Treaty, the Parties shall establish promptly a Standing Consultative Commission, within the framework of which they will:

(a) consider questions concerning compliance with the obligations assumed and related situations which may be considered ambiguous;

(b) provide on a voluntary basis such information as either Party considers necessary to assure confidence in compliance with the obligations assumed;

(c) consider questions involving unintended interference with national technical means of verification;

(d) consider possible changes in the strategic situation which have a bearing on the provisions of this Treaty;

(e) agree upon procedures and dates for destruction or dismantling of ABM systems or their components in cases provided for by the provisions of this Treaty;

(f) consider, as appropriate, possible proposals for further increasing the viability of this Treaty; including proposals for amendments in accordance with the provisions of this Treaty;

(g) consider, as appropriate, proposals for further measures aimed at limiting strategic arms.

2. The Parties through consultation shall establish, and may amend as appropriate, Regulations for the Standing Consultative Commission governing procedures, composition and other relevant matters.

Article XIV

1. Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty.

2. Five years after entry into force of this Treaty, and at five-year intervals thereafter, the Parties shall together conduct a review of this treaty.

Article XV

1. This Treaty shall be of unlimited duration.

2. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from the Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

Article XVI

1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. The Treaty shall enter into force on the day of the exchange of instruments of ratification.

2. This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

**FOR THE UNITED STATES
OF AMERICA**

**FOR THE UNION OF SOVIET
SOCIALIST REPUBLICS**

RICHARD NIXON

L. I. BREZHNEV

President of the United
States of America

General Secretary of the Central
Committee of the CPSU

**Agreed Statements, Common Understandings, and Unilateral Statements Regarding the Treaty
Between the United States of America and the Union of Soviet Socialist Republics on the
Limitation of Anti-Ballistic Missiles**

1. Agreed Statements

The document set forth below was agreed upon and initialed by the Heads of the Delegations on May 26, 1972 (letter designations added);

**AGREEMENT STATEMENTS REGARDING THE TREATY BETWEEN THE UNITED STATES OF
AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATIONS
OF ANTI-BALLISTIC MISSILE SYSTEMS**

[A]

The Parties understand that, in addition to the ABM radars which may be deployed in accordance with subparagraph (a) of Article III of the Treaty, those non-phased-array ABM radars operational on the date of signature of the Treaty within the ABM system deployment area for defense of the national capital may be retained.

[B]

The Parties understand that the potential (the product of mean emitted power in watts and antenna area in square meters) of the smaller of the two large phased-array ABM radars referred to in subparagraph (b) of Article III of the Treaty is considered for purposes of the Treaty to be three million.

[C]

The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers.

[D]

In order to insure fulfillment of the obligation not to deploy ABM systems and their components except as provided in Article III of the Treaty, the Parties agree that in the event ABM systems based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radars are created in the future, specific limitations on such systems and their components would be subject to discussion in accordance with Article XIII and agreement in accordance with Article XIV of the Treaty.

[E]

The Parties understand that Article V of the Treaty includes obligations not to develop, test or deploy ABM interceptor missiles for the delivery by each ABM interceptor missile of more than one independently guided warhead.

[F]

The Parties agree not to deploy phased-array radars having a potential (the produce of mean emitted power in watts and antenna area in square meters) exceeding three million, except as provided for in Articles III, IV and VI of the Treaty, or except for the purposes of tracking objects in outer space or for use as national technical means of verification.

[G]

The Parties understand that Article IX of the Treaty includes the obligation of the US and the USSR not to provide to other States technical descriptions or blue prints specially worked out for the construction of ABM systems and their components limited by the Treaty.

2. Common Understandings

Common understanding of the Parties on the following matters was reached during the negotiations;

A. Location of ICBM Defenses

The U.S. Delegation made the following statement on May 26, 1972:

Article III of the ABM Treaty provides for each side one ABM system deployment area centered on its national capital and one ABM system deployment area containing ICBM silo launchers. The two sides have registered agreement on the following statement: "The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers." In this connection, the U.S. side notes that its ABM system deployment area for defense of ICBM silo launchers, located west of the Mississippi River, will be centered in the Grand Forks ICBM silo launcher deployment area. (See Agreed Statement [C].)

B. ABM Test Ranges

The U.S. Delegation made the following statement on April 26, 1972:

Article IV of the ABM Treaty provides that "the limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges." We believe it would be useful to assure that there is no misunderstanding as to current ABM test ranges. It is our understanding that ABM test ranges encompass the area within which ABM components are located for test purposes. The current U.S. ABM test ranges are at White Sands, New Mexico, and at Kwajalein Atoll, and the current Soviet ABM test range is near Sary Shagan in Kazakhstan. We consider that non-phased array radars of types used for range safety or instrumentation purposes may be located outside of ABM test ranges. We interpret the reference in Article IV to "additionally agreed test ranges" to mean that ABM components will not be located at any other test ranges without prior agreement between our Governments that there will be such additional ABM test ranges.

On May 5, 1972, the Soviet Delegation stated that there was a common understanding on what ABM test ranges were, that the use of the types of non-ABM radars for range safety or instrumentation was not limited under the Treaty, that the reference in Article IV to "additionally agreed" test ranges was sufficiently clear, and that national means permitted identifying current test ranges.

C. Mobile ABM Systems

On January 29, 1972, the U.S. Delegation made the following statement:

Article V(1) of the Joint Draft Text of the ABM Treaty includes an undertaking not to develop, test, or deploy mobile land-based ABM systems and their components. ON May 5, 1971,

the U.S. side indicated that, in its view, a prohibition on deployment of mobile ABM systems and components would rule out the deployment of ABM launchers and radars which were not permanent fixed types. At that time, we asked for the Soviet view of this interpretation. Does the Soviet side agree with the U.S. side's interpretation put forward on May 5, 1971?

On April 13, 1972, the Soviet Delegation said there is a general common understanding on this matter.

D. Standing Consultative Commission

Ambassador Smith made the following statement on May 22, 1972:

The United States proposes that the sides agree that, with regard to initial implementation of the ABM Treaty's Article XIII on the Standing Consultative Commission (SCC) and of the consultation Articles to the Interim Agreement on offensive arms and the Accidents Agreement,¹ agreement establishing the SCC will be worked out early in the follow-on SALT negotiations; until that is completed, the following arrangements will prevail: when SALT is in session, any consultation desired by either side under these Articles can be carried out by the two SALT Delegations; when SALT is not in session, *ad hoc* arrangements for any desired consultations under these Articles may be made through diplomatic channels.

Minister Semenov replied that, on the *ad referendum* basis, he could agree that the U.S. statement corresponded to the Soviet understanding.

¹ See Article 7 of Agreement to Reduce the risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics, signed Sept. 30, 1971.

E. Standstill

On May 6, 1972, Minister Semenov made the following statement:

In an effort to accommodate the wishes of the U.S. side, the Soviet Delegation is prepared to proceed on the basis that the two sides will in fact observe the obligations of both the Interim Agreement and the ABM Treaty beginning from the date of signature of these two documents.

In reply, the U.S. Delegation made the following statement on May 20, 1972:

The U.S. agrees in principle with the Soviet statement made on May 6 concerning observance of obligations beginning from date of signature but we would like to make clear our understanding that this means that, pending ratification and acceptance, neither side would take any action prohibited by the agreements after they had entered into force. This understanding would continue to apply in the absence of notification by either signatory of its intention not to proceed with ratification or approval.

The Soviet Delegation indicated agreement with the U.S. statement.

3. Unilateral Statements

The following noteworthy unilateral statements were made during the negotiations by the United States Delegation:

A. Withdrawal from the ABM Treaty

On May 9, 1972, Ambassador Smith made the following statement:

The U.S. Delegation has stressed the importance the U.S. Government attaches to achieving agreement on more complete limitations on strategic offensive arms, following agreement on an ABM Treaty and on an Interim Agreement on certain measures with respect to the limitation of strategic offensive arms. The U.S. Delegation believes that an objective of the follow-on negotiations should be to constrain and reduce on a long-term basis threats to the survivability of our respective strategic retaliatory forces. The USSR Delegation has also indicated that the objectives of SALT would remain unfulfilled without the achievement of an agreement providing for more complete limitations on strategic offensive arms. Both sides recognize that the initial agreements would be steps toward the achievement of more complete limitations on strategic arms. If an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty. The U.S. does not wish to see such a situation occur, nor do we believe that the USSR does. It is because we wish to prevent such a situation that we emphasize the importance the U.S. Government attaches to achievement of more complete limitations on strategic offensive arms. The U.S. Executive will inform the Congress, in connection with Congressional consideration of the ABM Treaty and the Interim Agreement, of this statement of the U.S. position.

B. Tested in ABM Mode

On April 7, 1972, the U.S. Delegation made the following statement:

Article II of the Joint Text Draft uses the term "tested in an ABM mode," in defining ABM components, and Article VI includes certain obligations concerning such testing. We believe that the sides should have a common understanding of this phrase. First, we would note that the testing

provisions of the ABM Treaty are intended to apply to testing which occurs after the date of signature of the Treaty, and not to any testing which may have occurred in the past. Next, we would amplify the remarks we have made on this subject during the previous Helsinki phase by the remarks we have made on this subject during the previous Helsinki phase by setting forth the objectives which govern the U.S. view on the subject, namely, while prohibiting testing of non-ABM components for ABM purposes: not to prevent testing of ABM components, and not to prevent testing of non-ABM components for non-ABM purposes. To clarify our interpretation of "tested in an ABM mode," we note that we would consider a launcher, missile or radar to be "tested in an ABM mode" if, for example, any of the following events occur: (1) a launcher is used to launch an ABM interceptor missile, (2) an interceptor missile is flight tested against a target vehicle which has a flight trajectory with characteristics of a strategic ballistic missile flight trajectory, or is flight tested in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range, or is flight tested to an altitude inconsistent with interception or targets against which air defenses are deployed, (3) a radar makes measurements on a cooperative target vehicle of the kind referred to in item (2) above during the reentry portion of its trajectory or makes measurements in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range. Radars used for purposes such as range safety or instrumentation would be exempt from application of these criteria.

C. No-Transfer Article of ABM Treaty

On April 18, 1972, the U.S. Delegation made the following statement:

In regard to this Article [IX], I have a brief and I believe self-explanatory statement to make. The U.S. side wishes to make clear that the provisions of this Article do not set a precedent for whatever provision may be considered for a Treaty on Limiting Strategic Offensive Arms. The question of transfer of strategic offensive arms is a far more complex issue, which may require a different solution.

D. No Increase in Defense of Early Warning Radars

On July 28, 1970, the U.S. Delegation made the following statement:

Since Hen House radars [Soviet ballistic missile early warning radars] can detect and track ballistic missile warheads at great distances, they have a significant ABM potential. Accordingly, the U.S. would regard any increase in the defenses of such radars by surface-to-air missiles as inconsistent with an agreement.

Protocol to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems

Signed at Moscow July 3, 1974

Ratification advised by U.S. Senate November 10, 1975

Ratified by U.S. President March 19, 1976

Instruments of ratification exchanged May 24, 1976

Proclaimed by U.S. President July 6, 1976

Entered into force May 24, 1976

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the Basic Principles of Relations between the United States of America and the Union of Soviet Socialist Republics signed on May 29, 1972, Desiring to further the objectives of the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems signed on May 26, 1972, hereinafter referred to as the Treaty,

Reaffirming their conviction that the adoption of further measures for the limitation of strategic arms would contribute to strengthening international peace and security,

Proceeding from the premise that further limitation of anti-ballistic missile systems will create more favorable conditions for the completion of work on a permanent agreement on more complete measures for the limitation of strategic offensive arms,

Have agreed as follows:

Article I

1. Each Party shall be limited at any one time to a single area out of the two provided in Article III of the Treaty for deployment of anti-ballistic missile (ABM) systems or their components and accordingly shall not exercise its right to deploy an ABM system or its components in the second

of the two ABM system deployment areas permitted by Article III of the Treaty, except as an exchange of one permitted area for the other in accordance with Article II of this Protocol.

2. Accordingly, except as permitted by Article II of this Protocol: the United States of America shall not deploy an ABM system or its components in the area centered on its capital, as permitted by Article III(a) of the Treaty, and the Soviet Union shall not deploy an ABM system or its components in the deployment area of intercontinental ballistic missile (ICBM) silo launchers as permitted by Article III(b) of the Treaty.

Article II

1. Each Party shall have the right to dismantle or destroy its ABM system and the components thereof in the area where they are presently deployed and to deploy an ABM system or its components in the alternative area permitted by Article III of the Treaty, provided that prior to initiation of construction, notification is given in accord with the procedure agreed to in the Standing Consultative Commission, during the year beginning October 3, 1966 and ending October 2, 1978, or during any year which commences at five year intervals thereafter, those being the years for periodic review of the Treaty, as provided in Article XIV of the Treaty. This right may be exercised only once.

2. Accordingly, in the event of such notice, the United States would have the right to dismantle or destroy the ABM system and its components in the deployment area of ICBM silo launchers and to deploy an ABM system or its components in an area centered on its capital, as permitted by Article III(a) of the Treaty, and the Soviet Union would have the right to dismantle or destroy the ABM stem and its components in the area centered on its capital and to deploy an ABM system to its components in an area containing ICBM silo launchers, as permitted by Article III(b) of the Treaty.

3. Dismantling or destruction and deployment of Abm systems or their components and the notification thereof shall be carried out in accordance with Article VIII of the ABM Treaty and procedures agreed to in the Standing Consultative Commission.

Article III

The rights and obligations established by the Treaty remain in force and shall be complied with by the Parties except to the extent modified by this Protocol. In particular, the deployment of an ABM system or its components within the area selected shall remain limited by the levels and other requirements established by the Treaty.

Article IV

This Protocol shall be subject to ratification in accordance with the constitutional procedures of each Party. It shall enter into force on the day of the exchange of instruments of ratification and shall thereafter be considered an integral part of the Treaty.

DONE at Moscow on July 3, 1974, in duplicate, in the English and Russian languages, both texts being equally authentic.

For the United States of America:

RICHARD NIXON

President of the United States of America

For the Union of Soviet Socialist Republics:

L. I. BREZHNEV

General Secretary of the Central Committee of the CPSU

Appendix 2

PRESIDENT RONALD REAGAN'S ADDRESS TO THE NATION ON DEFENSE AND NATIONAL SECURITY

March 23, 1983

(Excerpts)

Now, thus far tonight I've shared with you my thoughts on the problems of national security we must face together. My predecessors in the Oval Office have appeared before you on other occasions to describe the threat posed by Soviet power and have proposed steps to address that threat. But since the advent of nuclear weapons, those steps have been increasingly directed toward deterrence of aggression through the promise of retaliation.

This approach to stability through offensive threat has worked. We and our allies have succeeded in preventing nuclear war for more than three decades. In recent months, however, my advisers, including in particular the Joint Chiefs of Staff, have underscored the necessity to break out of a future that relies solely on offensive retaliation for our security.

Over the course of these discussions, I've become more and more deeply convinced that the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence. Feeling this way, I believe we must thoroughly examine every opportunity for reducing tensions and for introducing greater stability into the strategic calculus on both sides.

One of the most important contributions we can make is, of course, to lower the level of all arms, and particularly nuclear arms. We're engaged right now in several negotiations with the Soviet Union to bring about a mutual reduction of weapons. . . . I'm totally committed to this course.

If the Soviet Union will join with us in our effort to achieve major arms reduction, we will have succeeded in stabilizing the nuclear balance. Nevertheless, it will still be necessary to rely on the specter of retaliation, on mutual threat. And that's a sad commentary on the human condition.

Wouldn't it be better to save lives than to avenge them? Are we not capable of demonstrating our peaceful intentions by applying all our abilities and our ingenuity to achieving a truly lasting stability? I think we are. Indeed, we must.

After careful consultation with my advisers, including the Joint Chiefs of Staff, I believe there is a way. Let me share with you a vision of the future which offers hope. It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. Let us turn to the very strengths in technology that spawned our great industrial base and that have given us the quality of life we enjoy today.

What if free people could live secure in the knowledge that their security did not rest upon the threat of instant U.S. retaliation to deter a Soviet attack, that we could intercept and destroy strategic ballistic missiles before they reached our own soil or that of our allies?

I know this is a formidable, technical task, one that may not be accomplished before the end of this century. Yet, current technology has attained a level of sophistication where it's reasonable for us to begin this effort. It will take years, probably decades of effort on many fronts. There will be failures and setbacks, just as there will be successes and breakthroughs. As we proceed, we must remain constant in preserving the nuclear deterrent and maintaining a solid capability for flexible response. But isn't it worth every investment necessary to free the world from the threat of nuclear war? We know it is. . . .

I clearly recognize that defensive systems have limitations and raise certain problems and ambiguities. If paired with offensive systems, they can be viewed as fostering an aggressive policy, and no one wants that. But with these considerations firmly in mind, I call upon the scientific community in our country, those who gave us nuclear weapons, to turn their great talents now to the cause of mankind and world peace, to give us the means of rendering these nuclear weapons impotent and obsolete.

Tonight, consistent with our obligations of the ABM treaty and recognizing the need for closer consultation with our allies, I'm taking an important first step. I am directing a comprehensive and intensive effort to define a long-term research and development program to begin to achieve our ultimate goal of eliminating the threat posed by strategic nuclear missiles. This could pave the way

for arms control measures to eliminate the weapons themselves. We seek neither military superiority nor political advantage. Our only purpose--one all people share--is to search for ways to reduce the danger of nuclear war.

My fellow Americans, tonight we're launching an effort which holds the promise of changing the course of human history. There will be risks, and results take time. But I believe we can do it. As we cross this threshold, I ask for your prayers and your support.

Source: *Public Papers of the Presidents of the United States: Ronald Reagan, 1983* (Washington, D.C.: G.P.O., 1984), 442-443.

Appendix 3

COMPARISON OF SDI BUDGET REQUESTS AND APPROPRIATIONS IN KEY TECHNOLOGIES

FYs 1985-1989
(\$ in millions)

	SATKA		DEW		KEW	
	Request	Approp	Request	Approp	Request	Approp
FY 85	\$ 721	546	\$ 489	376	\$ 356	256
FY 86	1386	857	966	844	860	596
FY 87	1263	911	1615	853	991	730
FY 88	1493	956	1104	832	1075	792
FY 89	1860	1101	1246	820	1200	773
TOTALS	\$6723	4371	\$5420	3725	\$4482	3147

	SC/BM/C3		SLKT	
	Request	Approp	Request	Approp
FY 85	\$ 99	99	\$ 112	112
FY 86	243	227	258	222
FY 87	462	387	454	338
FY 88	627	503	900	449
FY 89	788	506	1162	406
TOTALS	\$2219	1722	\$2886	1527

Multiple sources: House and Senate Armed Services and Appropriations Committees hearings on FYs 1985-1989 budgets.

Appendix 4

PROFILES OF PRO- AND ANTI- SDI LOBBYING AND INTEREST GROUPS

A. Pro-SDI Groups

American Conservative Union

Founded in 1964, the American Conservative Union (ACU) claimed 100,000 members by the mid-1980s, including Ronald Reagan, who was one of the ACU's most ardent admirers. Indeed, Reagan once described the ACU as "a dynamic, responsible organization" whose publications on SDI and other issues "are a valuable source of information."¹ As a rule the ACU is pro-defense and especially pro-SDI, and takes a dim view of arms control measures, such as the INF Treaty. Worried lest Reagan might bargain away SDI, the ACU urged him in November 1987 not to make any concessions that might endanger the program. The ACU also supported pro-SDI members of Congress, including Republican Senators Phil Gramm of Texas, Jesse Helms of North Carolina, Don Nickles of Oklahoma, and William Armstrong of Colorado, all of whom the Union included among its list of the "best and the brightest" on Capitol Hill. Congressional Quarterly estimated ACU's budget (1987) at approximately \$1.5 million.

American Enterprise Institute for Public Policy Research

The American Enterprise Institute (AEI), founded in 1943 for the "improvement of government policy and public policy debate," is the oldest and probably the most nationally well known conservative interest group in Washington. However, financial problems plagued its effectiveness in the 1980s; and while it supported the Reagan military buildup and SDI, AEI remained more interested in the promotion of its traditional objectives, mainly economic matters, concerning the protection private enterprise, regulatory reform, international trade, industrial

¹ From an ACU pamphlet, quoted in Foundation for Public Affairs, Public Interest Profiles, 1988-1989 (Washington, D.C.: Congressional Quarterly, 1988).

competitiveness, and promotion of the free-market system. Congressional Quarterly listed its budget (1987) at approximately \$9 million.

American Security Council

Founded in 1971, the American Security Council (ASC) was the successor to an earlier organization created in 1955 in Chicago and funded initially by Sears Roebuck and Company to gather information on the "loyalty" of personnel in businesses that had U.S. government contracts. The head of that organization and the ASC was a former FBI agent, John M. Fisher, who ran his operations from his 850 acre estate in Boston, Virginia. In addition to its pro-SDI lobbying, the American Security Council advocated increased national strength through greater defense preparedness. As an extension of its activities the American Security Council sponsored a political action committee that generally supported conservative Republican candidates, and a companion body, the Coalition for Peace Through Strength, which campaigned for increases in defense spending. No information is available on the ASC's budget.

Heritage Foundation

Started in 1973, the Heritage Foundation was, by the 1980s, one of the leading conservative "think tanks" in Washington, with extremely close ties to the Reagan White House. Among the Heritage Foundation's original benefactors was Joseph Coors, the Colorado beer baron, who sat on its board of directors while serving also as a member of Reagan's informal "kitchen cabinet." Because of wealthy donors like Coors and other conservatives, the Heritage Foundation had a strong financial base that allowed it to operate with an annual budget (1987) of \$11 million. In addition to its sponsorship of Daniel O. Graham's High Frontier organization, the Heritage Foundation gave SDI strong endorsement as well, with numerous publications and an active lobbying campaign on Capitol Hill.

B. Anti-SDI Groups

Arms Control Association

Described by its critics as the "priesthood of arms control," the Washington-based Arms Control Association (ACA) was one of the strongest and most active lobbyists against SDI in the 1980s. According to its president and executive director, Spurgeon M. Keeney, Jr., the ACA is not a "grassroots organization," but rather an association of some 1,600 professionals in the areas of science, defense, arms control, and foreign policy. Since its creation in 1971, the ACA has made the promotion of arms control its number one objective. Its main objection to SDI is that it would undercut the ABM Treaty, as evidenced by the Reagan administration's efforts to implement the broad interpretation of that agreement. "The association has documented the ABM Treaty," Keeney said in 1987. "The association has documented the basis for the traditional interpretation in the ratification and negotiation process."²

Common Cause

Established in 1970 by John Gardner, Secretary of Health, Education, and Welfare in the Johnson administration, Common Cause is one of the largest and most active of Washington's lobbying groups, claiming a membership of 290,000 and an annual budget of \$10 million. A product of the anti-war sentiment of the 1960s, Common Cause has adopted over the years a left-of-center political position. It was often critical of the Reagan administration's military buildup in the 1980s, and came out strongly against any near-term deployment of SDI, reinterpretation of the ABM Treaty, or the creation of an SDI Institute.

Federation of American Scientists

Accurate and reliable information on the Federation of American Scientists (FAS) is hard to come by. It was originally established as the Federation of *Atomic* Scientists in 1945 or 1946 (FAS

² Quoted in Defense News, Apr. 20, 1987.

publications give both dates) to promote civilian control of atomic energy, and has today either 4,000 or 5,000 members (again, FAS publications cite both figures). It describes itself as "the oldest organization dedicated to ending the arms race and avoiding the use of nuclear weapons."³ The organization's view of SDI is that strategic defenses are by definition destabilizing to the strategic environment, and that arms control measures offer a more viable and less risky alternative.

League of Women Voters

One of the oldest of the Washington lobbying organizations, the League of Women Voters (LWV) dates from 1920. Though nonpartisan insofar as political candidates are concerned, the League also runs an information program which it uses as a vehicle to further its views on national issues. Its opposition to SDI reflects its worry that space-based defenses will prove a hindrance to arms control, which the LWV have consistently championed. With a membership of over 100,000, a budget of \$4.2 million (1987), and a national network of chapters, LWV is an extremely potent force in Capitol Hill politics.

Union of Concerned Scientists

The Union of Concerned Scientists (UCS) was an outgrowth of the anti-ABM movement of the late 1960s. Founded in Cambridge, Massachusetts in 1969 under the leadership of the Viennese-born physicist Kurt Gottfried, the Union drew heavily on the Harvard-MIT scientific and intellectual community to lobby against the ABM program. In the 1980s, with President Reagan's unveiling of the Strategic Defense Initiative, it revived its campaign against strategic defenses, arguing that SDI would open the arms race to a whole new arena of competition and result in the militarization of outer space. Claiming a membership of some 100,000 "sponsors," the UCS maintained an active anti-SDI lobbying presence on Capitol Hill and, to help further its efforts, headed up a loose public information organization called the Coalition to Stop Star Wars. According to the Congressional Quarterly organization, the UCS had a 1987 budget of \$3.2 million.

³ Federation of American Scientists, "The Strategic Defense Initiative: Areas of Concern--A Staff Study, John Pike, ed. (Washington, D.C., June 10, 1985), i.

NOTE ON SOURCES AND SELECT BIBLIOGRAPHY

The congressional sources most useful to this study were the annual hearings and reports generated by the House and Senate committees that exercise oversight responsibilities for the Strategic Defense Initiative. These include the House and Senate Armed Services Committees, with responsibility for the annual defense authorization bill; the House and Senate Appropriations Committees and their Defense Subcommittees, which produce the annual military spending bill; and the House Foreign Affairs and Senate Foreign Relations Committees, which held intermittent hearings in the 1980s pertinent to SDI on such issues as U.S.-Soviet relations, arms control, and the ABM Treaty. For the annual floor debates on these measures, see the transcribed proceedings published daily in the Congressional Record and the ensuing conference committee reports reconciling differences between the House- and Senate-passed authorization and appropriations bills.

Beyond these printed sources, material on congressional activity affecting SDI becomes exceedingly thin. Interviews (listed below) provided some further details, but I found members of Congress and their staff, proponents and opponents of SDI alike, often reluctant to talk. Some would agree to interviews in principal, but could never find time to meet. Despite the risk, I therefore had no choice but to delve into newspaper accounts quoting congressional sources. The most reliable tended to be the New York Times, the Washington Post, the Wall Street Journal, and the Congressional Quarterly Weekly Report, with the latter offering by far the most detailed and authoritative coverage of congressional business.

The administration's side of the story is not especially well documented either. The Strategic Defense Initiative Organization (SDIO) has yet to establish consistent guidelines for records management, leaving individual offices to fend for themselves in deciding what to keep and what to discard. For the purposes of this study, the most pertinent records were those kept by SDIO's Office of External Affairs, which maintains an ongoing congressional correspondence file, including written exchanges with members of Congress, congressional press releases, congressional reports, and other documentation bearing on SDIO's relations with Capitol Hill. The SDIO Director's office also

keeps a congressional correspondence file, sometimes duplicating the material held in External Affairs, which was also useful. Despite repeated inquiries, I was unable to find much in the way of memoranda for the record (MFR) documenting face-to-face meetings between SDIO officials and members of Congress. It seems that, as a matter of course, SDIO's legislative liaison officers either do not make or keep such documentation. The few MFRs I did manage to locate were predominantly those kept by Lt. Col. Jon A. Anderson while he was legislative liaison in 1985. I found those memoranda, quite by accident, buried in the back of a drawer in his former desk.

Of immense help in filling gaps in the record, especially where evolution of the SDI program was concerned, was the small collection of miscellaneous documents (for the most part still classified) kept by the SDIO Historian. These were particularly useful on the origins of SDI and the work of the Fletcher, Hoffman, and Miller panels, which are covered in considerable detail in a collection of notebooks compiled at the direction of Brig. Gen. Robert R. Rankin, who presided over the SDI program until Lt. Gen. Abrahamson took charge in the spring of 1984.

INTERVIEWS

Unless otherwise indicated, interviews were conducted by the author. Copies of transcripts and/or notes of these interviews are on file in the SDIO Historian's Office, Department of Defense, Washington, D.C.

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Representative George E. Brown, Jr., Washington, D.C., March 12, 1990.

Frank C. Carlucci, Washington, D.C., September 9, 1991.

Lt. Gen. Kenneth B. Cooper, USA (Ret.). Member of the Fletcher Panel, Washington, D.C., March 10, 1989.

Paul H. Nitze, Washington, D.C., July 16, 1990.

Maj. Gen. Robert R. Rankine, Jr., USAF. Interviewed by Lt. Col. Donald Baucom, USAF, Washington, D.C., n.d.

Robert Sherman, Legislative Assistant to Representative Les AuCoin. Washington, D.C., February 28, 1990.

Gordon Tillery, SDIO Legislative Liaison, Washington, D.C., November 29, 1989.

Senator Malcolm Wallop, Washington, D.C., June 6, 1990.

Caspar Weinberger, Washington, D.C., June 13, 1990.

George O. Withers, Legislative director to Representative Ronald V. Dellums, Telephone, February 27, 1990.

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